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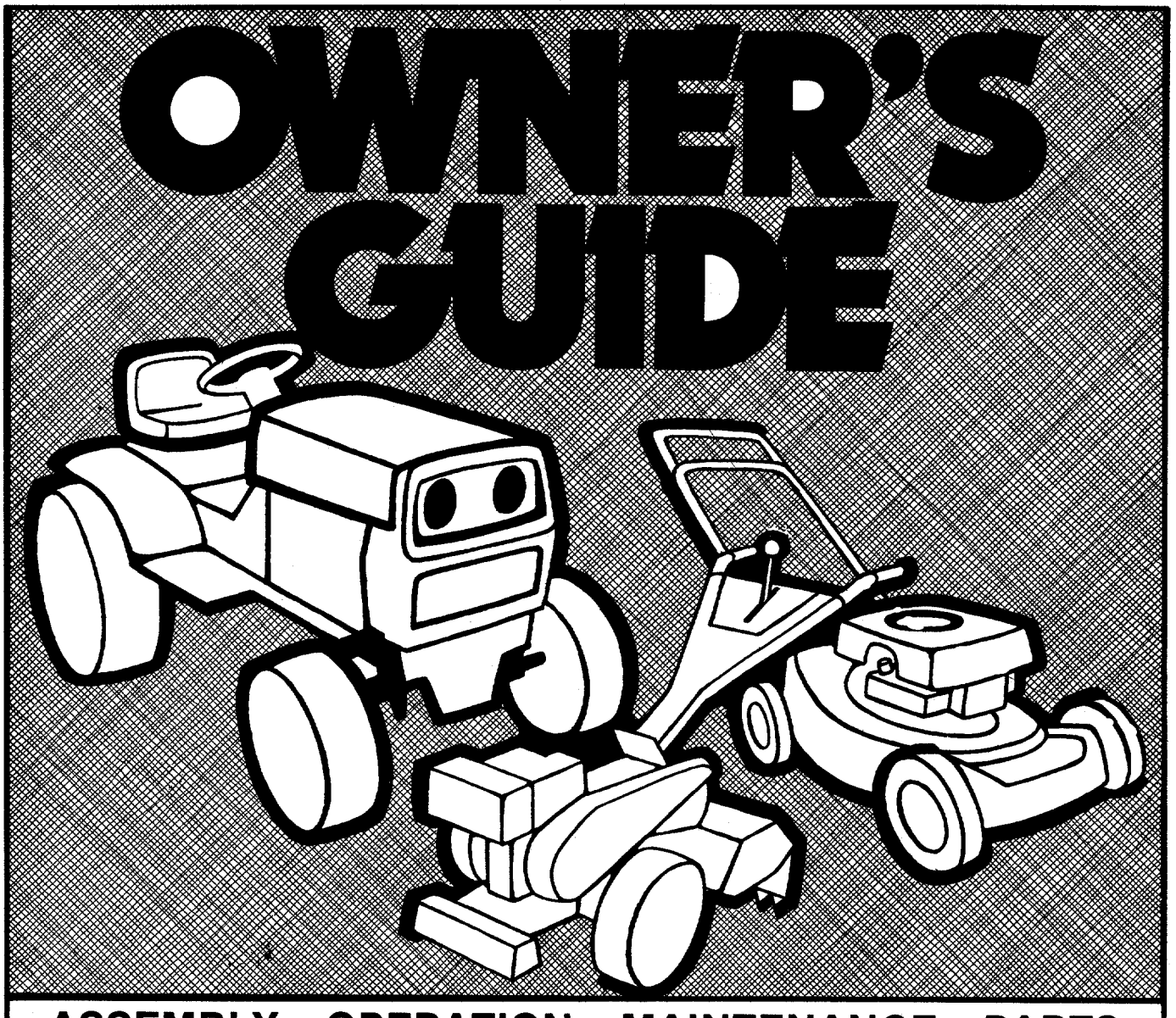
OWNER'S GUIDE



ASSEMBLY • OPERATION • MAINTENANCE • PARTS

38″ LAWN TRACTORS

Important:

Read Safety Rules and Instructions Carefully

Model Numbers
131-487A
131-487-300

PRINTED IN U.S.A.

FORM NO. 770-0837

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LIMITED WARRANTY

For one year from the date of original retail purchase, MTD PRODUCTS INC will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by MTD PRODUCTS INC.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

This warranty will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of MTD.

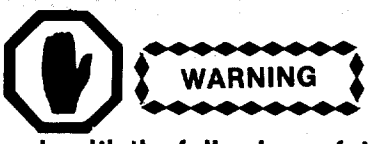
The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by MTD.

This warrany gives you specific legal rights. You may also have other rights which vary from state to state.

WARNING

TO PURCHASERS
OF INTERNAL COMBUSTION ENGINE EQUIPPED
MACHINERY OR DEVICES IN THE STATE OF CALIFORNIA

The equipment which you have just purchased does not have a spark arrester. If this equipment is used on any forest covered land, brush covered land, or grass covered unimproved land in the State of California, before using on such land, the California law requires that a spark arrester be provided. In addition, spark arrester is required by law to be in effective working order. The spark arrester must be attached to the exhaust system and comply with Section 4442 of the California Public Resources Code.



To reduce the potential for any injury, comply with the following safety instructions. Failure to comply with the instructions may result in personal injury.

SAFE OPERATION PRACTICES FOR RIDING VEHICLES

1. It is suggested that this manual be read in its entirety before attempting to assemble or operate this unit. Keep this manual in a safe place for future reference and for ordering replacement parts.
2. This unit is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.
3. Know the controls and how to stop quickly—READ THIS OWNER'S MANUAL.
4. Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
5. Do not carry passengers.
6. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, a small object may have been overlooked and could be accidently thrown by the mower in any direction and cause injury.
7. Clear work area of objects which might be picked up and thrown by the mower in any direction and cause injury.
8. Stop the blade(s) when crossing gravel drives, walks or roads.
9. Disengage all attachment clutches and shift into neutral before attempting to start engine.
10. Disengage power to attachment(s) and stop engine before leaving operating position.
11. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times as the rotating blade(s) can cause injury.
12. Disengage power to attachment(s) and stop engine before making any repairs or adjustments. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
13. Before attempting to unclog the mower or discharge chute, stop the engine. The mower blade(s) may continue to rotate for a few seconds after the engine is shut off. Therefore, be sure the blade(s) have stopped completely. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
14. Disengage power to attachment(s) when transporting or not in use.
15. Take all possible precautions when leaving vehicle unattended such as disengaging power-take-off, lowering attachments, shifting into neutral, setting parking brake, stopping engine and removing key.
16. Do not stop or start suddenly when going uphill or downhill. Mow up and down face of steep slopes; never across the face.
17. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.
18. Stay alert for holes in terrain and other hidden hazards.
19. Use care when pulling loads or using heavy equipment.
    A. Use only approved drawbar hitch points.
    B. Limit loads to those you can safely control.
    C. Do not turn sharply. Use care when backing.
    D. Use counterweight(s) or wheel weights when suggested in owner's manual.
20. Watch out for traffic when crossing or near roadways.
21. When using any attachments, never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
22. Handle gasoline with care. It is highly flammable.
    A. Use approved gasoline container.
    B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline.
    C. Open doors if engine is run in garage. Exhaust fumes are dangerous. Do not run engine indoors.
23. Keep the vehicle and attachments in good operating condition, and keep safety devices in place. Use guards as instructed in owner's manual.
24. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
25. Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow engine to cool before storing in any enclosure.
26. To reduce fire hazard, keep engine free of grass, leaves or excessive grease.
27. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object. The damage should be repaired before restarting and operating the equipment.
28. Do not change the engine governor settings or overspeed the engine.
29. When using the vehicle with mower, proceed as follows:
    (1) Mow only in daylight or in good artificial light.
    (2) Never make a cutting height adjustment while engine is running if operator must dismount to do so.
    (3) Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher.
    (4) Check blade mounting bolts for proper tightness at frequent intervals.
30. Check grass catcher bags frequently for wear or deterioration. For safety protection, replace only with new bag meeting original equipment specifications.
31. Look behind to make sure the area is clear before placing the transmission in reverse and continue looking behind while backing up.

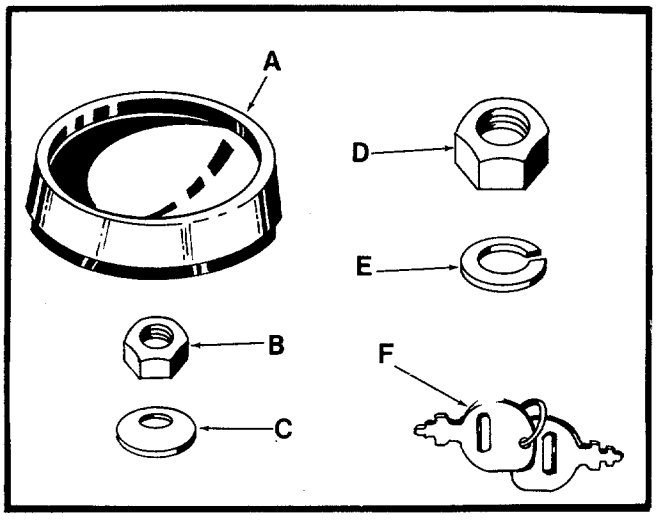


FIGURE 1.

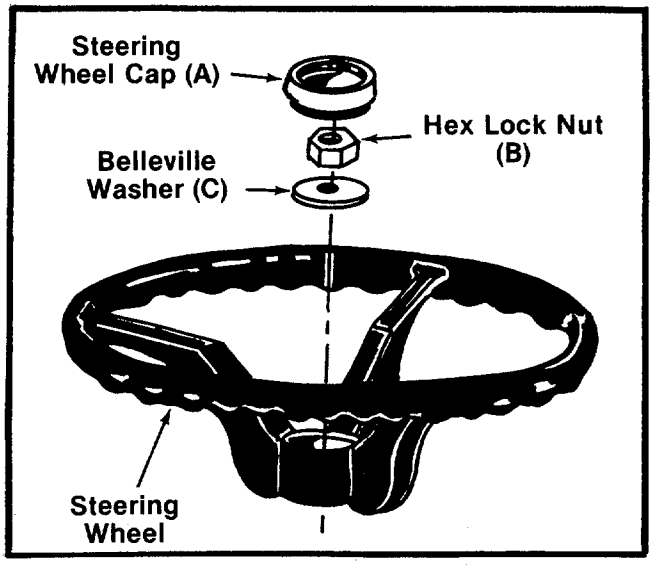


FIGURE 2.

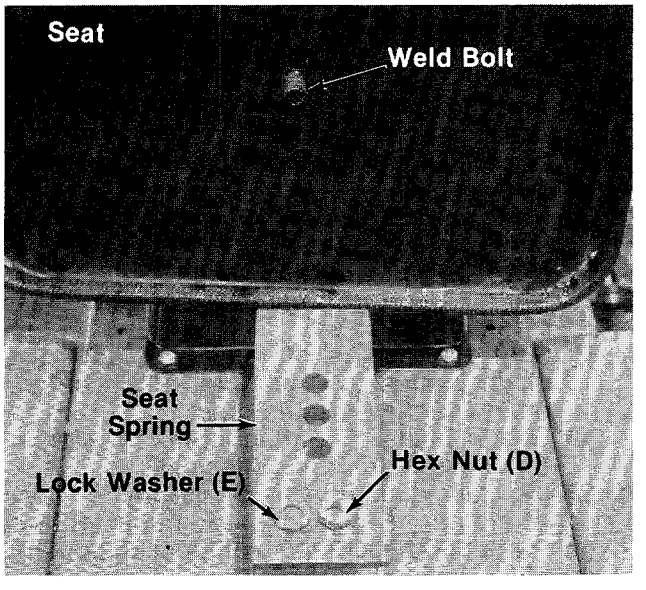


FIGURE 3.

ASSEMBLY INSTRUCTIONS

NOTE

This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see operating section of this manual for proper fuel and engine oil recommendations.

LIST OF CONTENTS IN HARDWARE PACK:

(See Figure 1)

A (1) Steering Wheel Cap
B (1) Hex Lock Nut 5/16-18 Thread
C (1) Belleville Washer
D (1) Hex Nut ½-13 Thread
E (1) Lock Washer ½" I.D.
F (1) Set of Ignition Keys
G (1) Rubber Band (Not Shown)

NOTE

Reference to right-hand or left-hand side of machine is from the driver's seat facing forward.

1. Remove the lawn mower and all parts from the carton. Make certain that all loose parts and literature have been removed before the carton is discarded.
2. Place steering wheel over steering shaft.
3. Secure with belleville washer (C) and hex lock nut (B). See figure 2.
4. Press the cap (A) on the steering wheel by hand.
5. Use the hex nut (D) and lock washer (E) to attach the seat to the seat spring in one of the three adjustment holes. See figure 3.

NOTE

Check ALL nuts and bolts for correct tightness.

BATTERY INFORMATION

WARNING

A. Battery acid must be handled with great care as it will blister the skin and damage clothing. It is advisable to wear goggles, rubber gloves, and a protective apron when working with it.

B. If for any reason acid should be spattered in the eyes, wash it out immediately with clean cold water. Seek medical aid if discomfort continues.

C. If acid gets on clothes, dilute it with clean water first, then neutralize with dilute ammonia water or a water solution of baking soda.

D. Since battery acid is corrosive to metals, do not pour into any sink or drain. Rinse empty electrolyte containers and mutilate before discarding.

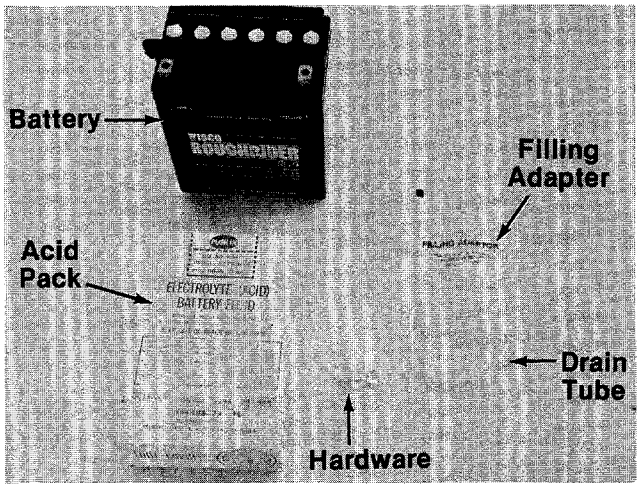


FIGURE 4.

FIGURE 5.

E. Keep sparks, flame, cigarettes away.

F. Hydrogen gas is generated during charging and discharging.

G. Ventilate when charging or using in enclosed space.

H. When using a charger—to avoid sparks, NEVER connect or disconnect charger clips to battery while charger is turned on.

I. Always shield eyes, and protect skin and clothing when working near batteries.

DANGER

BATTERIES CONTAIN SULFURIC ACID AND MAY CONTAIN EXPLOSIVE GASES (when electrolyte has been added).

ACTIVATING AND INSTALLING THE BATTERY

1. Upon opening the battery pack, you should receive acid pack, battery, drain tube, filling adapter and hardware. See figure 4.

DANGER

BATTERIES CONTAIN SULFURIC ACID AND MAY CONTAIN EXPLOSIVE GASES (when electrolyte has been added).

2. Place the battery on table or workbench to be filled.

3. Place one end of clear plastic drain tube on manifold of battery. See figure 5.

NOTE

Some batteries may already have the drain tube installed, in which case it may be necessary to snip off the sealed end.

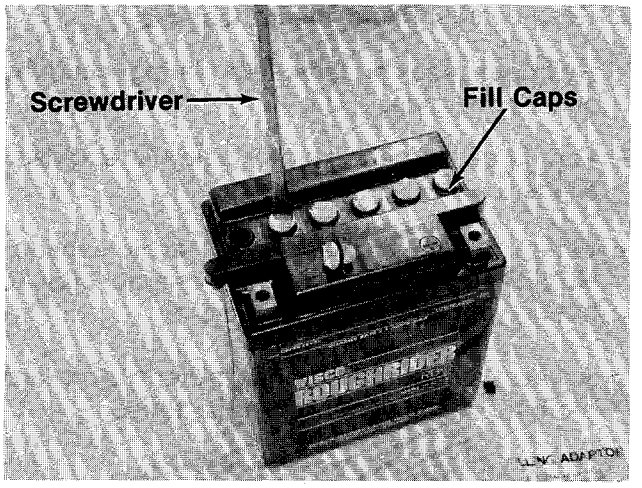


FIGURE 6.

4. Remove the six fill caps from the top of the battery. A screwdriver will make it easier. See figure 6.

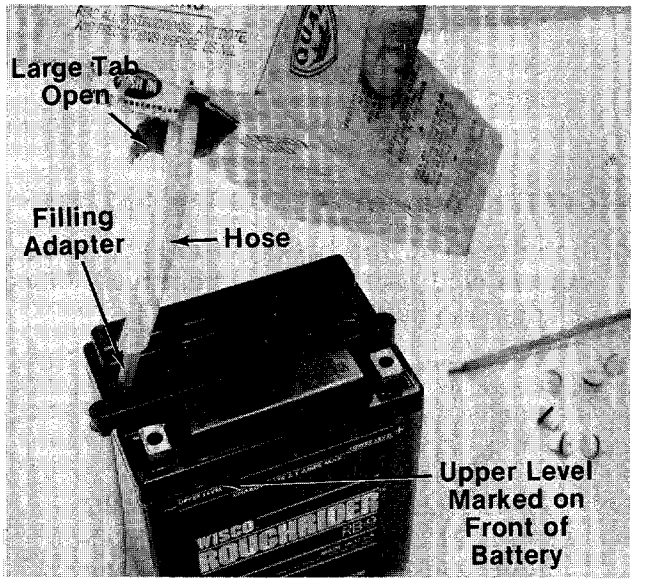


FIGURE 7.

5. Lay acid package down, with "push in" facing up. Using thumb, push in small perforated tab at dot on front of package. Tear down large tab to solid line, exposing hose. **Do not** use a sharp tool or object to open acid package.
6. Pull out hose from package and hold upright. Squeeze hose forcing all acid back into package. Cut off tip of hose and insert filling adapter. See figure 7.
7. Fill each cell to upper level marked on front of battery. Reassemble fill caps to battery. See figure 7.
8. Allow battery to sit for 20 minutes to 1/2 hour. Add additional acid if necessary to bring it up to the proper level.
9. The battery can be charged after the 20 minutes sitting period. The battery can be SLOW CHARGED (DO NOT FAST CHARGE) at a maximum bench rate of 1.4 amperes until the specific gravity reading is 1.260-1.280. Charge for a minimum of 2 hours and a maximum of 8 hours.

WARNING

POISON/DANGER

CAUSES SEVERE BURNS

Contains sulfuric acid. Avoid contact with skin, eyes or clothing. Antidote: EXTERNAL—Flush with water. INTERNAL—Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or veg. oil. Call physician immediately. Eyes: Flush with water for 15 minutes and get prompt medical attention.

Batteries produce explosive gases. Keep sparks, flame, cigarettes away. Ventilate when charging or using in enclosed space.

Always shield eyes when working near batteries.

KEEP OUT OF REACH OF CHILDREN

NOTE

Charging rate after battery has been put into operation: The battery is to be charged with the charger provided for a period of 14-16 hours. NO LONGER THAN 30 HOURS.

CAUTION

After battery has been in service, add only distilled water. DO NOT ADD ACID.

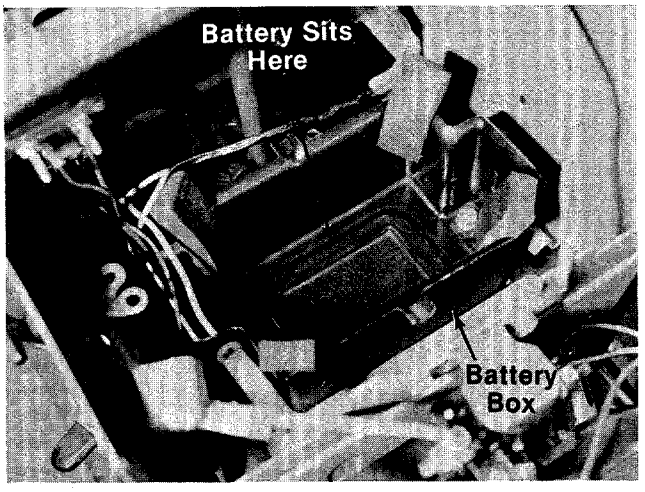


FIGURE 8.

10. Open the hood of the lawn tractor. Figure 8 shows the battery box in which the battery will be mounted.

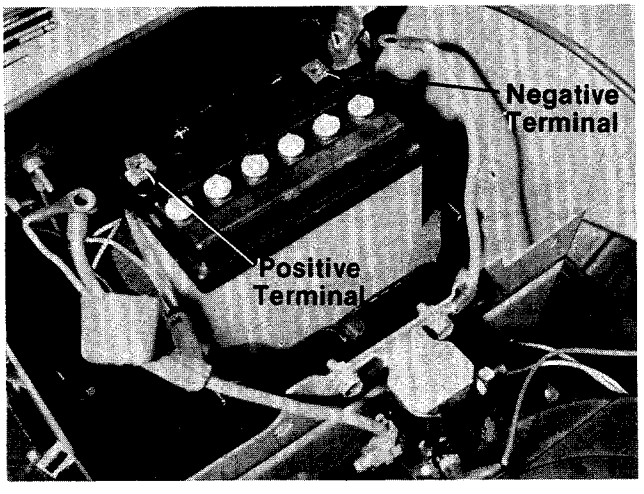


FIGURE 9.

11. Place the battery in the rider so that the positive terminal is towards the right side of the unit. See figure 9.

NOTE

Right and left hand side of the unit is determined by sitting on the seat in the operating position, facing forward.

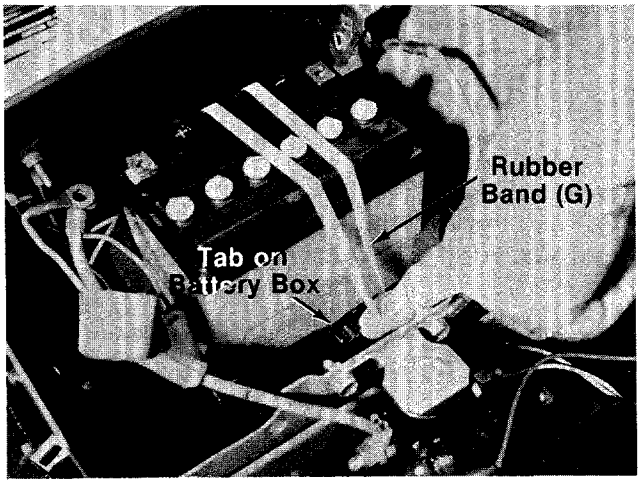


FIGURE 10.

12. Secure the battery to the battery box by stretching the rubber band (G) provided across the battery. Loop each end around the tab on the sides of the battery box. See figure 10.

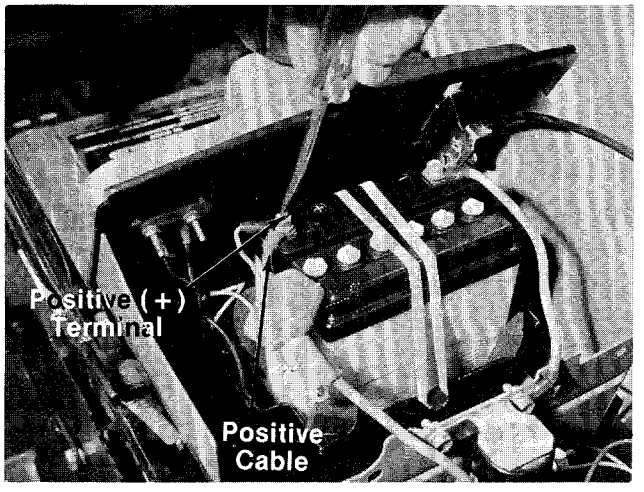


FIGURE 11.

13. Slide the square nut (provided with battery hardware) into the positive (+) terminal. Slide back the rubber boot which is on the positive cable. Place the positive (heavy red wire) cable and the small red wire (with a fuse holder in it) on the positive terminal. Secure with screw and lock washer provided. See figure 11.
14. Slide the square nut (provided with battery hardware) into the negative (–) terminal. Place the negative (heavy red wire) cable on the negative terminal. Secure with screw and lock washer provided.

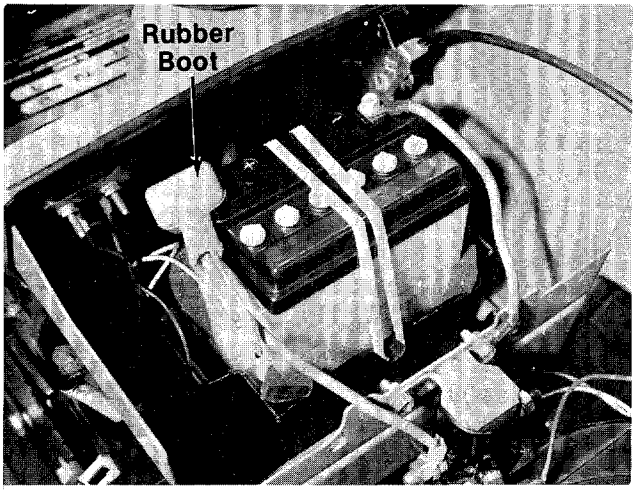


FIGURE 12.

15. Slide the rubber boot over the positive terminal. See figure 12.

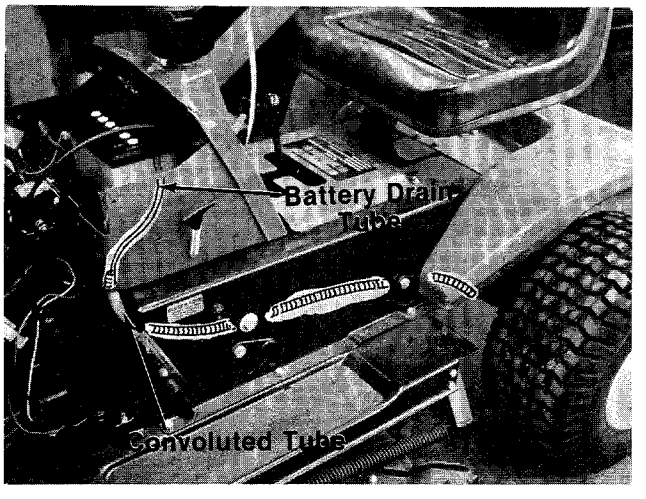


FIGURE 13.

16. Feed the end of the battery drain tube into the convoluted tube already installed in tractor. See figure 13.

CONTROLS

a. **Throttle Control.** The throttle control is used to regulate the engine speed and choke the engine. The engine should be operated from ¾ to full throttle when operating the cutting deck or snow thrower (optional). See Figure 14.

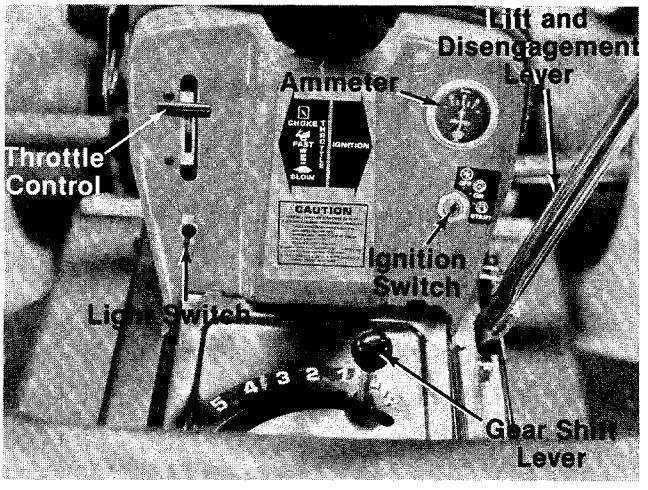


FIGURE 14.

b. **Lift and Disengagement Lever.** It is used to raise the cutting deck. Pulling it all the way back and locking it disengages the blades. The engine will not start unless the lift and disengagement lever is in the disengaged position. See figure 14.

c. **Ignition Switch.** See figure 14. Turn the key to the "START" position to start the engine. When the engine is running, let the key return to the "ON" position. To stop the engine, turn the key to the left to the "OFF" position and remove it to prevent accidental starting.

d. **Ammeter.** The ammeter registers the rate of battery charge or discharge. The ammeter should register on the plus (+) side when the engine is running in the fast position until the battery is completely charged. With a fully charged battery or with the engine idling, the ammeter will not show a charge. See figure 14.

e. **Light Switch.** Push the light switch to turn on the lights. The lights will only operate when the engine is running. See figure 14.

f. **Gear Shift Lever.** The gear shift lever is used to shift into one of five Forward Gears, "NEUTRAL" or "REVERSE." See figure 15.

FIGURE 15.

g. **Brake.** The brake pedal is located on the right hand side of the mower and is operated by depressing it with your right foot. See figure 16.

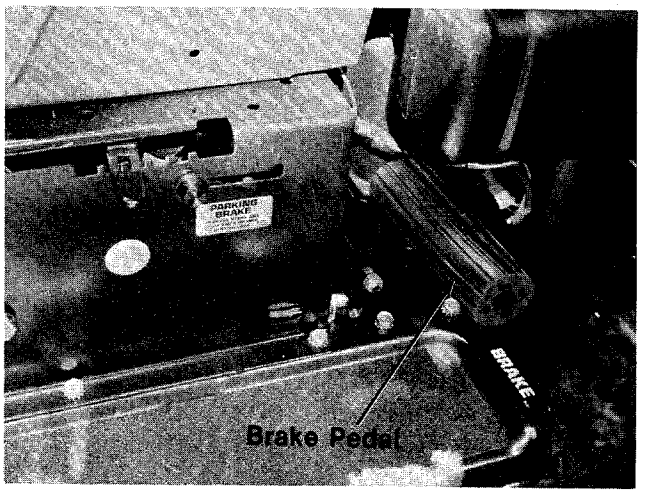


FIGURE 16.

h. **Brake Lock.** The brake lock is located on the right hand side of the mower. To lock the brake, depress the brake pedal and lift up the lock button. The pedal will stay depressed. To release, depress the pedal. See figure 17.

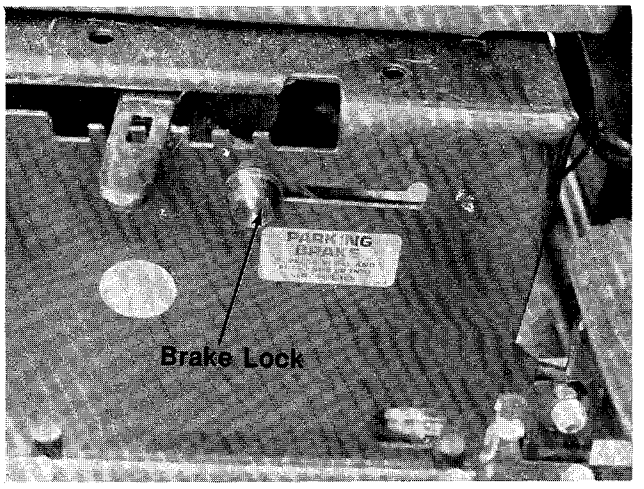


FIGURE 17.

i. **Clutch Pedal.** The clutch pedal is used to disengage the drive mechanism. Depressing the clutch pedal at any time will reduce mower speed. If depressed all the way, it will stop the mower. See figure 18.

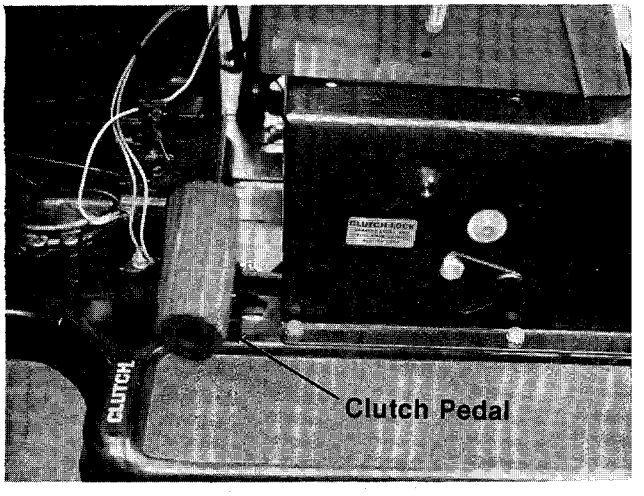


FIGURE 18.

j. **Clutch Lockout.** When the clutch pedal is depressed all the way, it can be locked by placing the clutch lockout in the "START" position as shown in figure 19. The clutch lockout must be in this position before the engine will start.

NOTE

The engine will not start unless the clutch lockout is in the "START" position and the lift lever is in the "DISENGAGED" position.

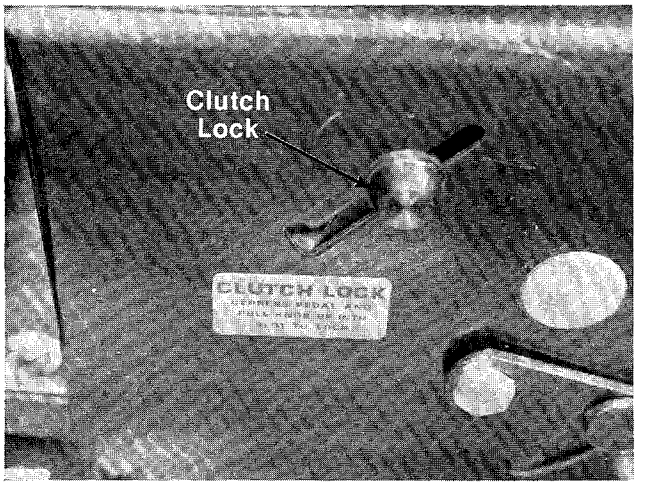


FIGURE 19.

k. **Cutting Controls.** The cutting controls consist of the height of cut stop and the wheel height adjusters.

Height of Cut Stop. See figure 20. Lift the stop and set it at the desired cutting height.

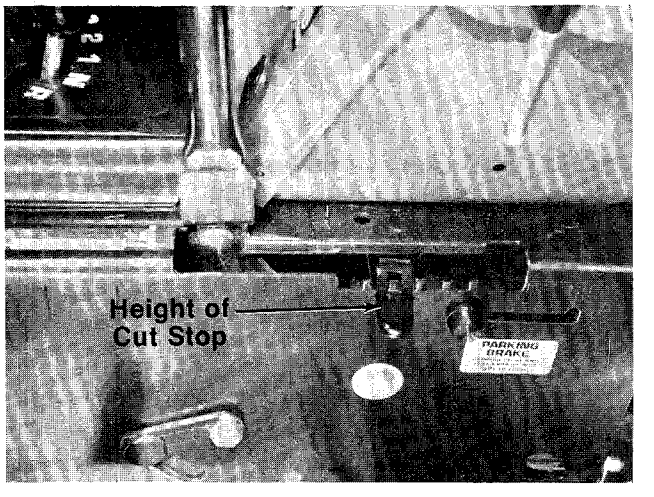


FIGURE 20.

Wheel Height Adjuster. See figure 21. Move the lever towards the wheel and set it in the desired cutting height.

The cutting height of the mower can be set in two different ways: FULL FLOAT position where the deck follows the contour of the ground, and the SUSPENDED position where the deck hangs from the frame of the rider. The suspended position is normally used for cutting rough uneven ground.

To set the cutting deck in the full float position, set the wheel height adjusters in the desired cutting height as indicated in figure 21. Set height of cut stop all the way forward.

To set the cutting deck in the suspended position, set the height of cut stop in the desired cutting height and then set the deck wheels so they just clear the ground.

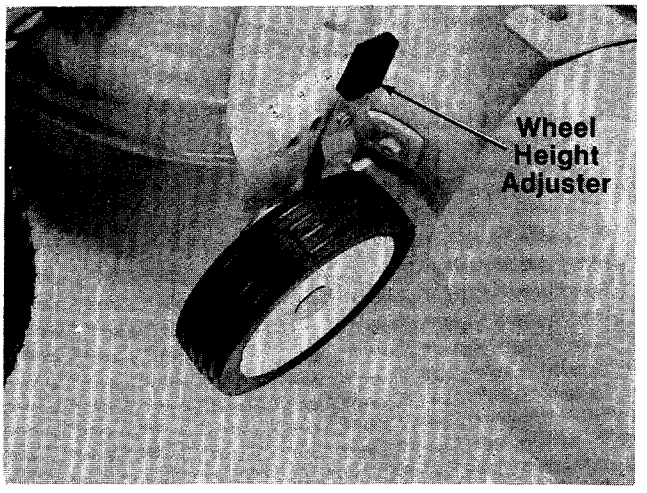


FIGURE 21.

CAUTION

Parking brake MUST be disengaged before unit is put into motion.

NOTE

Unit is equipped with separate brake and clutch pedals. It is necessary to disengage clutch when applying brakes to stop.

OPERATION

CAUTION

1. **Keep all shields in place.**
2. **Before leaving operator's position:**
   a. **Shift transmission to neutral**
   b. **Set parking brake**
   c. **Disengage attachment clutch**
   d. **Shut off engine**
   e. **Remove ignition key**
3. **Wait for all movement to stop before servicing machine.**
4. **Keep people and pets a safe distance away from machine.**
5. **Look to the rear before backing up.**

TIRE PRESSURE

FOR SHIPPING PURPOSES, THE TIRES ON YOUR UNIT MAY BE OVER-INFLATED. TIRE PRESSURE SHOULD BE REDUCED BEFORE UNIT IS PUT INTO OPERATION. PRESSSURE SHOULD BE APPROXIMATELY 15 P.S.I. EQUAL TIRE PRESSURE SHOULD BE MAINTAINED ON ALL TIRES. MAXIMUM TIRE PRESSURE IS 30 P.S.I.

CAUTION

Installation of tire to rim:

1. Lubricate tire beads and rim flanges.
2. Do not exceed 30 P.S.I. when seating beads.
3. Adjust to recommended pressure after beads are sealed.

STARTING THE ENGINE

Be sure to follow the instructions for the oil and gasoline as described in the engine manual.

1. Be sure the fuel shut-off valve is open. See figure 22.

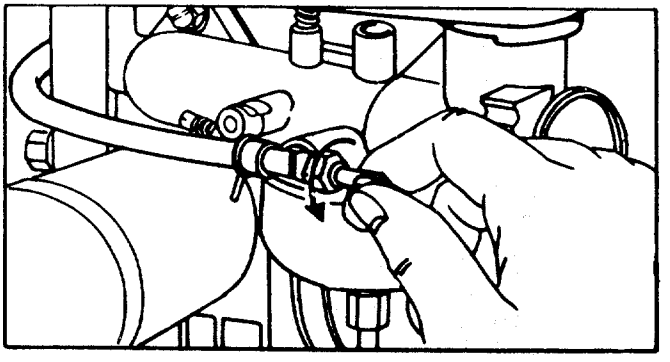


FIGURE 22. FUEL SHUT-OFF VALVE

2. Place the clutch lockout in the "START" position. See figure 19.
3. Place the lift and disengagement lever in the DISENGAGED position. See figure 14.

NOTE

This unit is equipped with a safety interlock system for your protection. The purpose of the safety interlock system is to prevent the engine from cranking or starting unless the clutch pedal is depressed and the lift and disengagement lever is in the disengaged position.

WARNING

Do not operate the rider if the interlock system is malfunctioning because it is a safety device, designed for protection.

4. Set the throttle control in the CHOKE position. See figure 14.
5. Turn the ignition key to the "START" position. When the engine is running, let the key return to the "ON" position. See figure 14.

STOPPING THE ENGINE

Turn the ignition key to the left to the "OFF" position and remove the key to prevent accidental starting.

NOTE

A brief break-in period is essential to ensure maximum engine and mower life. This consists of running the engine at half speed for a period of time required to use one tank of gasoline. It is also recommended to change crankcase oil after the first 2 hours of operation.

IMPORTANT

After striking a foreign object, stop the engine. Remove wire from spark plug, thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.

OPERATING THE MOWER

1. Set the desired cutting height.
2. Start the engine as outlined on page 11.
3. Move throttle control to desired engine speed.
4. Depress the clutch pedal and shift into first gear or reverse.
5. Release clutch pedal slowly to put unit into motion.
6. Depress the clutch pedal when shifting gears.

NOTE

DO NOT force the gear shift lever!

7. The mower is brought to a stop by depressing the brake and clutch pedals. The drive belt will be disengaged and the brake will be applied.

CAUTION

If the mower is not to be used for a long period, place the gear shift lever in NEUTRAL and stop the engine. DO NOT leave the machine on an incline.

OPERATING THE CUTTER BLADE

The cutting blades may be engaged while the mower is moving or standing still. DO NOT engage the cutting blades abruptly as the sudden belt tension on the pulley may cause the engine to stall.

WARNING

When the blade drive is engaged, keep feet and hands away from the discharge opening and from the blade.

To stop the blades, move the lift and disengagement lever (figure 20) into the DISENGAGED position. This raises the deck and disengages the blades.

NOTE

When the machine is used for other than mowing operations the blade drive should be disengaged.

ADJUSTMENTS

CHAIN ADJUSTMENT

To tighten the chain, loosen two lock nuts on each side of rear axle as shown in figure 23.

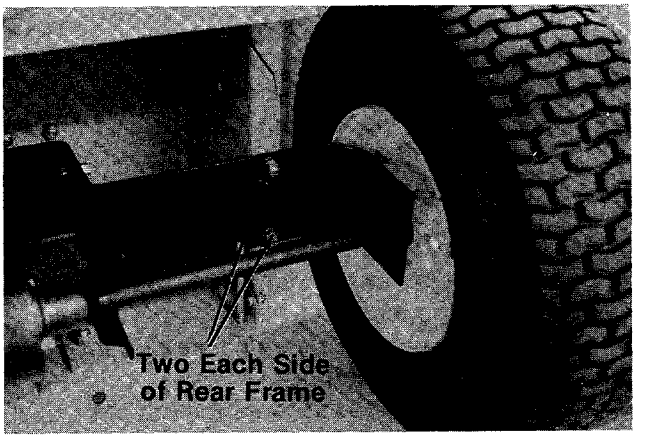


FIGURE 23.

Tighten the adjusting nuts (figure 24) equally on both sides. Tighten until the chain has ½ inch slack between the sprockets.

The adjusting nuts can be tightened individually to align the axle.

Tighten the 4 lock nuts after the adjustment is made.

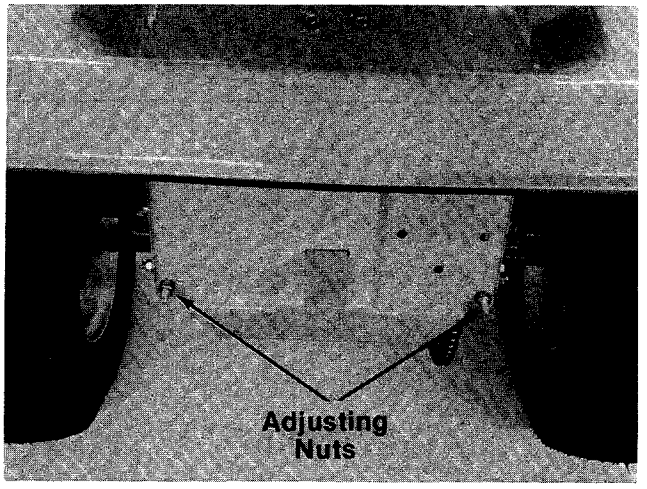


FIGURE 24.

WHEEL ADJUSTMENT

The caster (forward slant of the king pin) and the camber (tilt of the wheels out at the top) requires no adjustment. Automotive steering principles have been used to determine the caster and camber on the tractor. The front wheels should toe-in 1/8 inch.

To adjust the toe-in follow these steps.

1. Remove the elastic lock nut and drop the tie rod end from the wheel bracket. See figure 25.

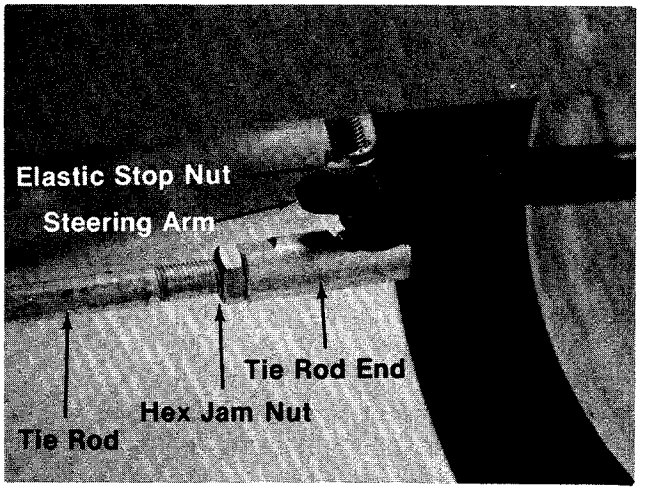


FIGURE 25.

2. Loosen the hex jam nut on tie rod.
3. Adjust the tie rod assembly for correct toe-in.

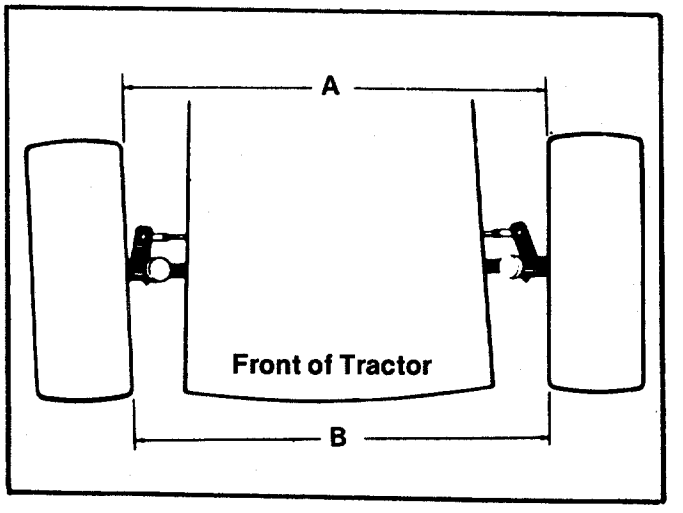


FIGURE 26. TOE-IN DIAGRAM

Dimension "B" should be approximately 1/8" less than Dimension "A." See figure 26.

A.) To increase Dimension "B," screw tie rod into tie rod end.

B.) To decrease Dimension "B," unscrew tie rod from tie rod end.

C.) Reassemble tie rod. Check dimensions. Re-adjust if necessary.

CARBURETOR ADJUSTMENT (See figure 27)

WARNING

If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage all clutches, and blades. Keep clear of all moving parts. Be careful of heated surfaces and muffler.

Minor carburetor adjustment may be required to compensate for differences in fuel, temperature, altitude and load.

To Adjust Carburetor—Turn needle valve clockwise until it just closes.

CAUTION

Valve may be damaged by turning it in too far.

Now open needle valve 1-1/8 turns counterclockwise. Close idle valve in same manner and open 1-1/8 turns. This initial adjustment will permit the engine to be started and warmed up prior to final adjustment.

Final Adjustment—Turn needle valve in until engine misses (lean mixture). Then turn it out past smooth operating point until engine runs unevenly (rich mixture). Now turn needle valve to the midpoint between rich and lean so the engine runs smoothly. Hold throttle at idle position and set idle speed adjusting screw until fast idle is obtained (1750 RPM). Hold throttle in idle position and turn idle valve in (lean) and out (rich) until engine idles smoothly. Then reset idle speed adjusting screw so that engine idles at 1750 RPM. Release throttle—engine should accelerate without hesitation or sputtering. If engine does not accelerate properly, the carburetor should be readjusted to a slightly richer mixture.

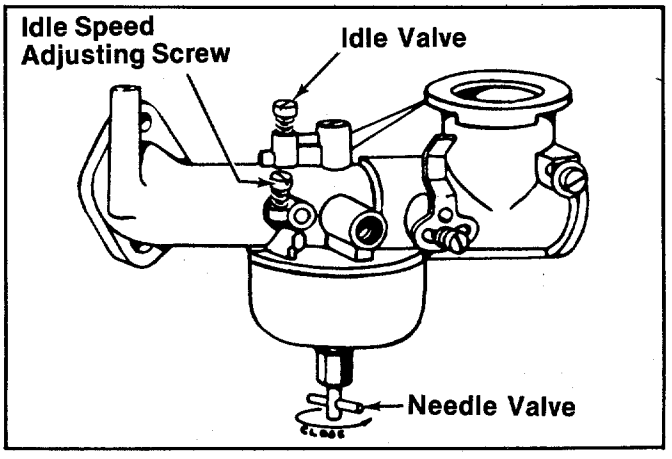


FIGURE 27. CARBURETOR ADJUSTMENT

ADJUSTING CARBURETOR CHOKE

Proper choke adjustment is dependent upon proper adjustment of remote controls on the powered equipment.

To Check Operation of Choke-A-Matic Controls:

Move control lever to CHOKE position. See figure
The carburetor choke should be closed.

NOTE

The air cleaner can be removed to check the operation of the choke.

To Adjust:

Place control lever on equipment in FAST (high speed) position. Loosen control casing clamp screw B. Move control casing A and wire until lever D touches choke operating link at C. Tighten casing clamp screw B. See figure 28.

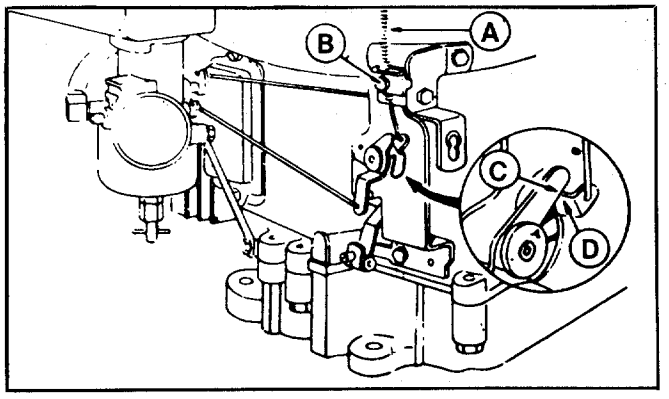


FIGURE 28. CHOKE ADJUSTMENT

BRAKE ADJUSTMENT

During normal operation of this machine, the brakes are subject to wear and will require periodic examination and adjustment.

CAUTION

Do not have the engine running when you adjust the brakes.

1. Move the brake pedal forward by hand until resistance is noted. This is the point where the brake pedal spring begins to stretch.

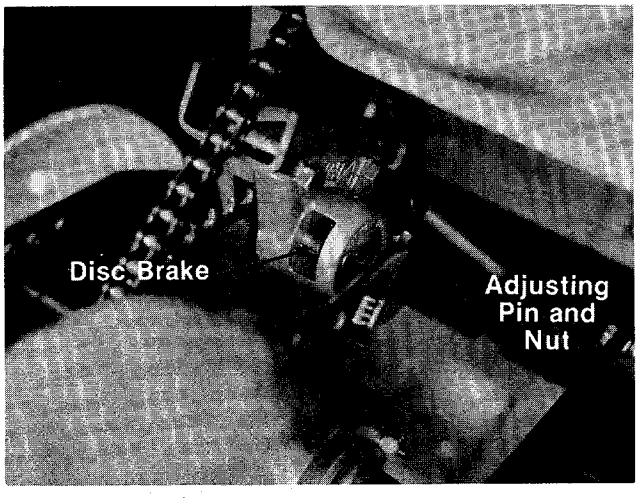


FIGURE 29.

2. If the adjustment is correct, the brake lock should move ¼ inch. See figure 30.
3. Loosen nut at brake lever, thread adjuster pin in or out as necessary and tighten nut. See figure 29.

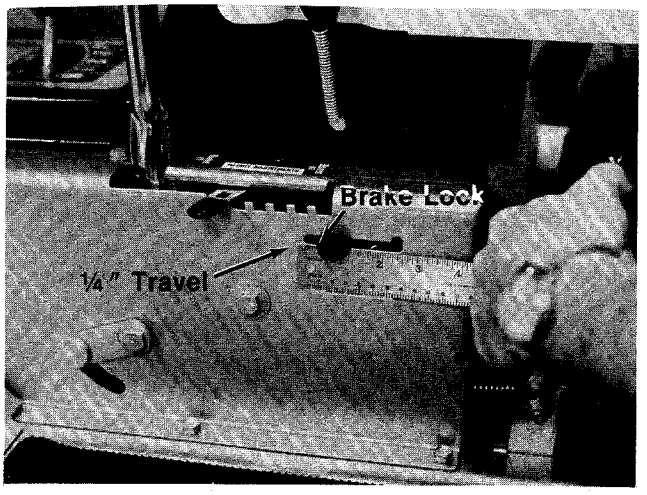


FIGURE 30.

LUBRICATION

1. **Wheel Bearings (4).** Lubricate with SAE 30 oil after every 25 hours of operation or once a season. See figure 31.
2. **King Pins (2).** Lubricate with SAE 30 oil after every 25 hours of operation or once a season. See figure 31.

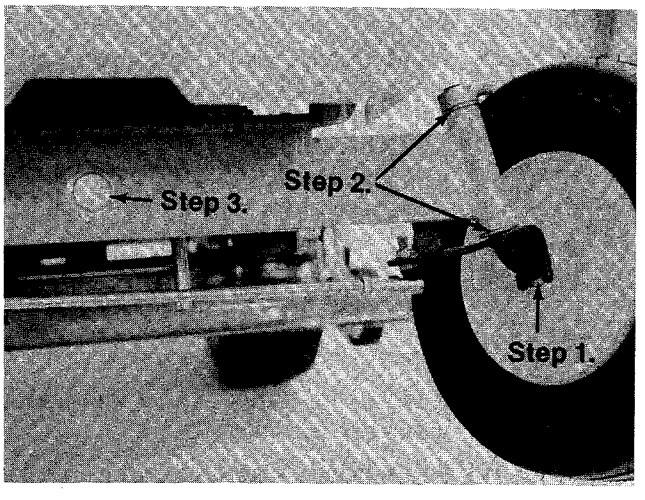


FIGURE 31.

3. **Front Pivot Bolt (1).** Lubricate with SAE 30 oil after every 25 hours of operation or once a season. See figure 31.
4. **Steering Gears (2).** Lubricate teeth of gears with automotive multi-purpose grease after every 25 hours of operation or once a season.
5. **Steering Column Bearings (2).** Lubricate the top and bottom bearings with SAE 30 oil after every 25 hours of operation or once a season.
6. **Chain.** Lubricate the chain once a season with SAE 30W oil. Be careful not to get oil on disc brake pads. Wipe off any excess oil on sprocket. See figure 32.

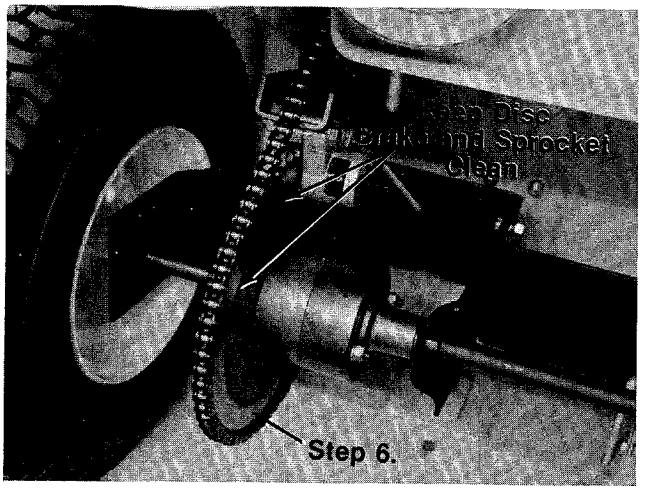


FIGURE 32.

The following parts should be oiled once a year with SAE 30 oil.

1. All deck links.
2. Clutch and brake pivot points and linkages.
3. Height adjustment levers.
4. Steering column bearings.

The following items have sealed bearings and require no further lubrication.

1. Blade Spindles
2. Idler Bearings
3. Tie Rod Ends

MAINTENANCE

CRANKCASE OIL

To ensure maximum engine performance, perform the following periodic maintenance:

Oil Check

Check the oil level in the crankcase before each use of the machine and after every five hours of operation. Oil should be kept between the add and full marks on the dipstick. See figure 33.

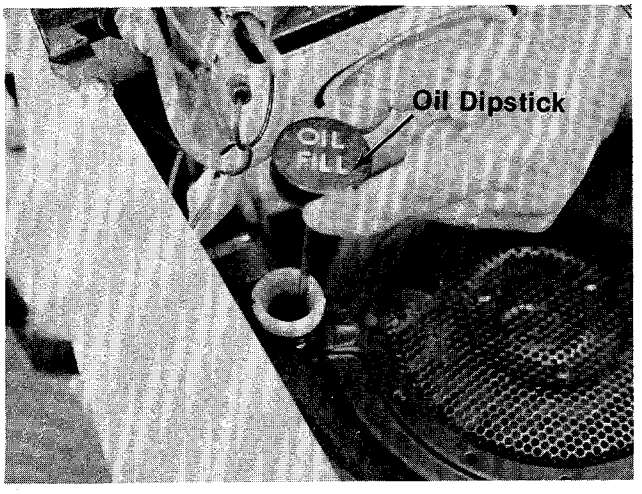


FIGURE 33.

After the first five hours of operating a new engine, drain the oil (see figure 37) from the crankcase while engine is still hot and refill crankcase with new oil; thereafter change the oil every 25 hours of operation. This procedure ensures minimum wear of engine parts. To change the oil, proceed as follows:

1. With the machine on level ground, place a suitable metal container under the oil drain plug, then remove the drain plug. See figure 34.

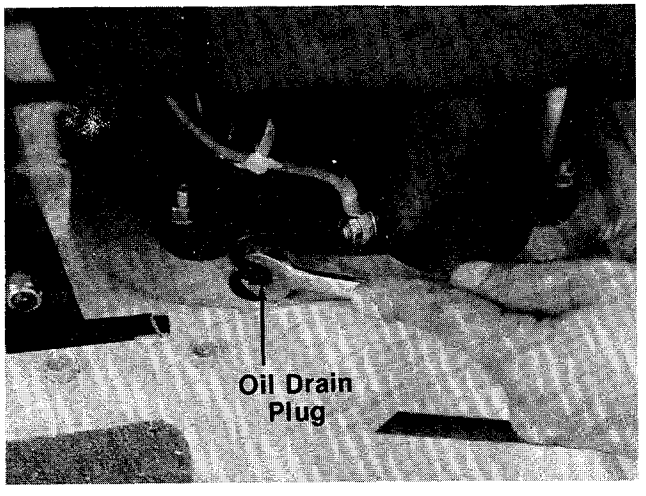


FIGURE 34.

2. After the oil has been drained completely from the crankcase, replace the drain plug and tighten.
3. Refill crankcase with 2¼ pints of good quality, type MS, engine oil into the crankcase. Summer use SAE 30; Winter (below 40°F) use SAE 5W-20 or SAE 10W.

AIR CLEANER

Under normal operating conditions, the air cleaner, located on top of the carburetor, must be serviced after every ten hours of use. Under extremely dusty operating conditions, the air cleaner must be serviced after every hour of operation. Refer to figure 35.

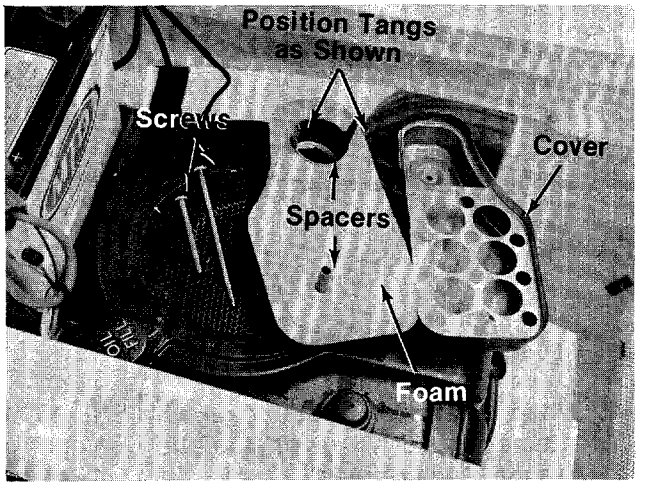


FIGURE 35.

When assembling the air cleaner, make certain the lip of the foam element extends over edge of the air cleaner body. The foam element will form a protective seal.

Step 1. Remove two screws and lift off complete air cleaner assembly.

Step 2. Remove screen and spacers from foam element.

Step 3. Remove foam element from air cleaner body.

Step 4. a. Wash foam element in kerosene or liquid detergent and water to remove dirt.

b. Wrap foam in cloth and squeeze dry.

c. Saturate foam in SAE 30 engine oil, then squeeze out excess oil.

d. Assemble parts. Fasten to carburetor with screw.

CLEANING ENGINE AND BLADE HOUSING

Any fuel or oil spilled on the machine should be wiped off promptly. Grass, leaves, and other dirt must not be left to accumulate around the cooling fins of the engine or on any part of the machine.

Clean the underside of the blade housing after each mowing.

BELTS

Check that belts are free of oil or dirt. Wipe the belts periodically with a clean rag.

NOTE

Belt tension is maintained by the spring on the idler bracket on the drive belts and the belt tension on the deck belt is maintained by the two deck springs.

SPARK PLUG

The spark plug should be cleaned and the gap reset to a 0.030-inch clearance once a season (see figures 36 and 37. Spark plug replacement is recommended at the start of each mowing season; check engine manual for correct plug type.

NOTE

Whenever the spark plug is removed for cleaning, it is advisable to replace the spark plug gasket with a new gasket.

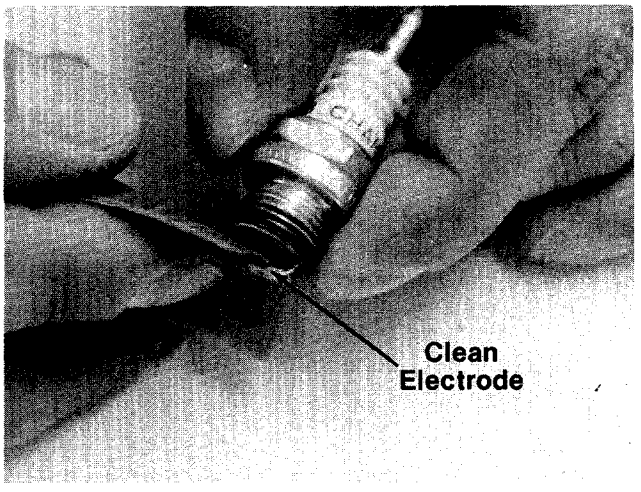


FIGURE 36.

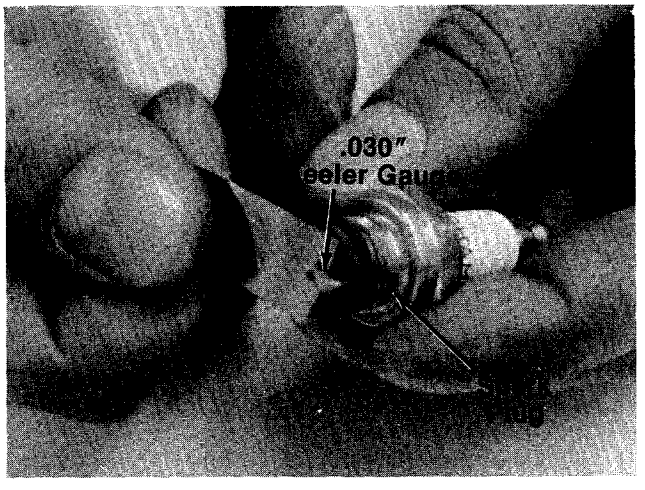


FIGURE 37.

REPLACING BLADE

WARNING

Before beginning work on the cutter blade, remove the spark plug from the cylinder.

Removing and Sharpening Blades. Remove the center bolt and lock washer. See figure 38. Pull the blade and blade adapter from the blade spindle.

The adapter can be removed from the blade by removing the two adapter bolts, lock washers and nuts.

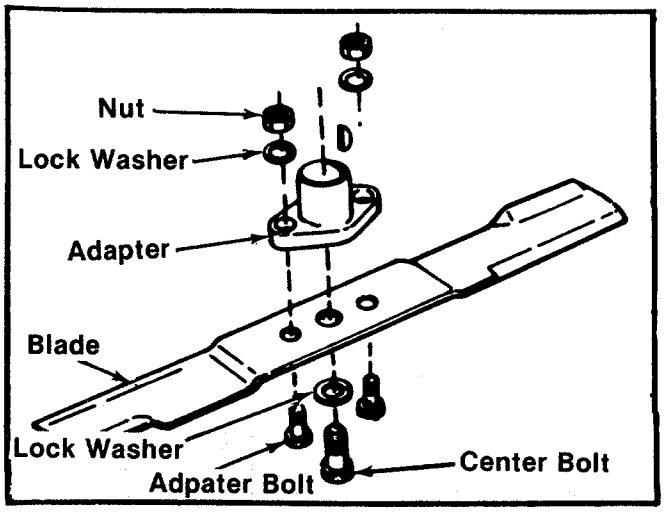


FIGURE 38. BLADE REMOVAL

NOTE

To insure safe operation of your unit, ALL nuts and bolts must be checked periodically for correct tightness.

BELT REMOVAL AND REPLACEMENT

Preparation

WARNING

Disconnect the spark plug wire and ground it against the engine.

1. Remove the battery.

CAUTION

Disconnect the negative terminal first and connect last when installing the battery.

2. To prevent gasoline from leaking from the engine, remove the gasoline cap, place a piece of thin plastic over the neck of the gasoline tank and screw on the cap.
3. Close the fuel shut-off valve.
4. Set the brake and lock it.
5. Lift the front end of the rider up and rest it on the rear wheels. It will balance in this position.
6. Do not leave the rider in this position any longer than necessary as oil may get into cylinder head. If this happens, remove the spark plug and crank over the engine to clear the oil.

Removing the Deck Belt

1. Place the lift lever in the disengaged position.
2. Remove the belt keeper and large bolt from the engine pulley. See figure 39.

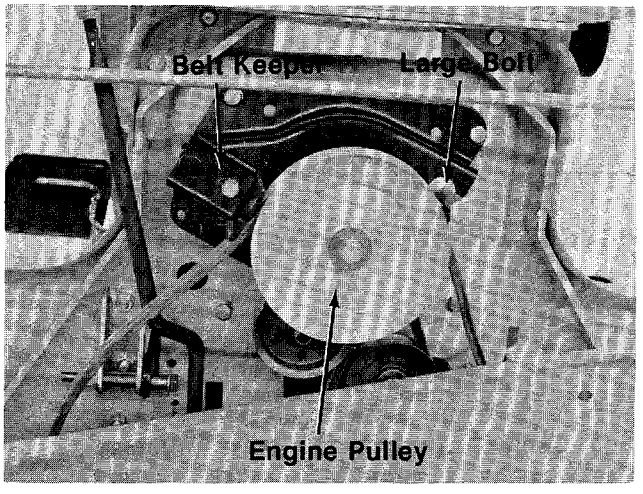


FIGURE 39.

3. Unhook the deck belt from the engine pulley.
4. Place the lift lever in the engaged position.
5. Remove the two deck tension springs. See figure 40.
6. Remove the cotter pins holding the four front deck links. The deck can now be tipped forward. See figure 40.
7. Remove the belt guard on the left deck pulley by removing the two bolts and nuts.
8. Remove the three shoulder bolts and washers next to the right deck pulley.
9. Remove and replace the deck belt. Reassemble in reverse order.

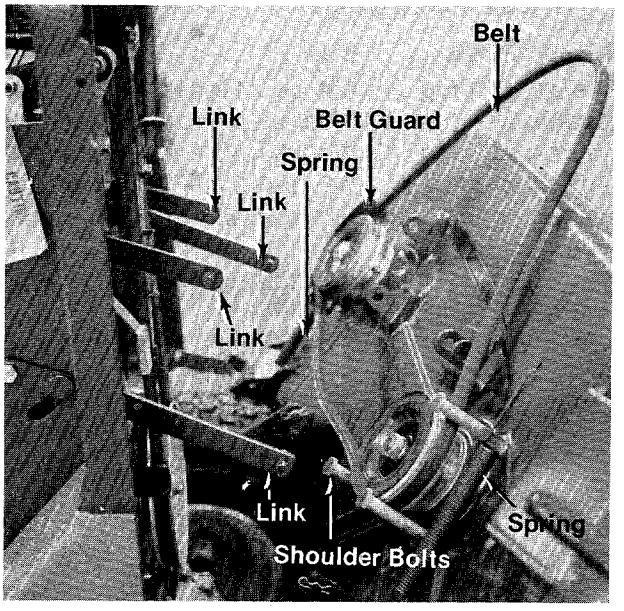


FIGURE 40.

Removing the Front Transmission Belt

1. Follow steps 1 through 6 on Preparing for Belt Removal.
2. Place the lift lever in the disengaged position.
3. Remove the belt keeper and large bolt from the engine pulley. See figure 39.
4. Unhook the deck belt from the engine pulley.
5. Place the lift lever in the engaged position.
6. Unhook the tension springs. See figure 40.
7. Remove the six cotter pins holding the deck to the links.
8. Lift off the deck and set it aside.
9. Remove the engine belt guard by removing the two front engine mounting bolts. See figure 41.

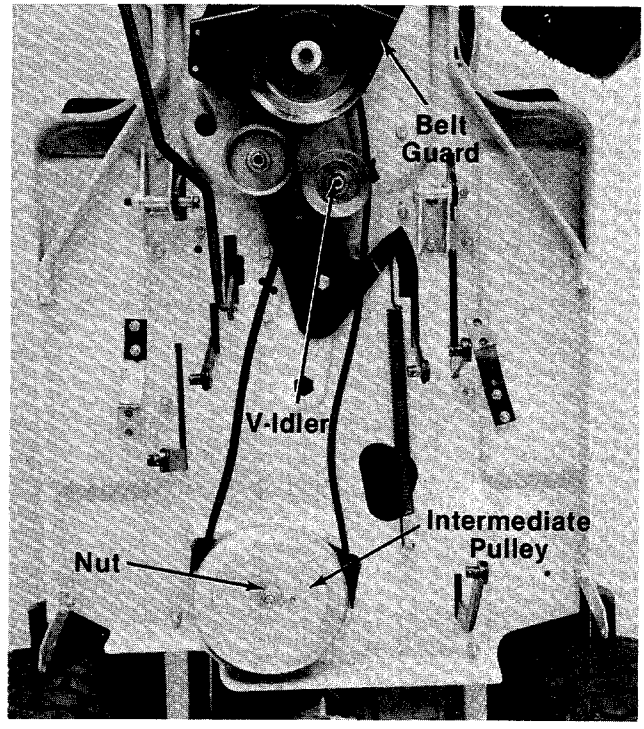


FIGURE 41.

10. Slide off the intermediate pulley and remove the belt.
11. Slide off the V-idler and remove the belt.
12. Unhook the belt from the engine pulley. See figure 42.
13. Replace the belt and reassemble in reverse order.

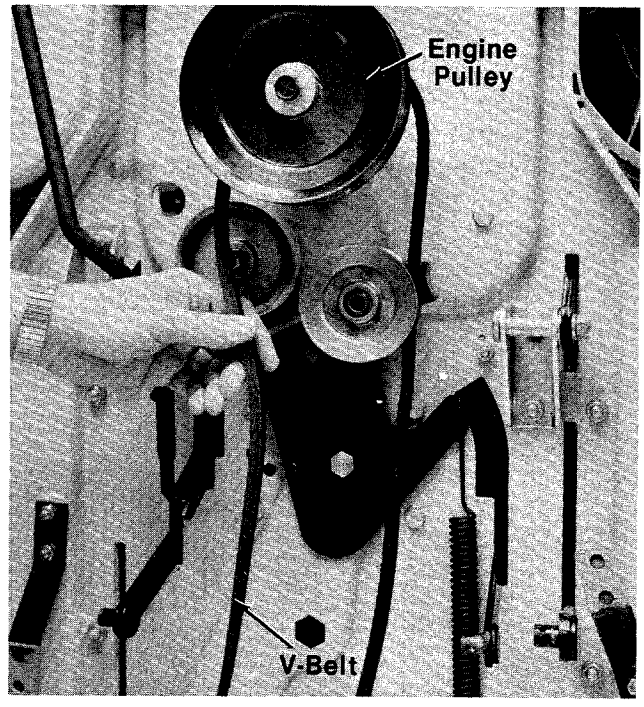


FIGURE 42.

BATTERY REMOVAL OR INSTALLATION

WARNING

When removing the battery, follow this order of disassembly to prevent the screwdriver from shorting against the frame.

1. Remove the Negative cable.
2. Remove the Positive cable.

To install a battery:

1. Attach the Positive cable.
2. Attach the Negative cable.

JUMP STARTING

1. Attach the first jumper cable from the Positive terminal of the good battery to the Positive terminal of the dead battery.
2. Attach the second jumper cable from the Negative terminal of the good battery to the FRAME OF THE UNIT WITH THE DEAD BATTERY.

WARNING

Failure to use this starting procedure could cause sparking, and the gas in either battery could explode.

BATTERY MAINTENANCE

1. Check periodically (every two weeks or before and after charging) to be sure electrolyte level is above the lowest line on battery. Add only distilled water or good quality drinking water. NEVER add additional acid or other chemicals to battery after initial activation.
2. The battery should be checked with a hydrometer after every 25 hours of operation. If the specific gravity is less than 1.225, remove battery and recharge.
3. Coat the terminals and exposed wiring with a thin coat of grease or petroleum jelly for longer service and protection against electrolyte corrosion.
4. The battery should be kept clean. Any deposits of acid should be neutralized with soda and water. Be careful not to get this solution in the cells.

BATTERY STORAGE

1. Charge battery using normal methods. NEVER store discharged battery as it will not recover.
2. When storing battery for extended periods, disconnect battery cables. Removing battery from unit is recommended.
3. Store in cold, dry place.
4. Recharge battery whenever the specific gravity is less than 1.225, before returning to service, or every two months, whichever occurs first.

COMMON CAUSES FOR BATTERY FAILURE ARE:

1. Overcharging
2. Undercharging
3. Lack of water
4. Loose hold downs and/or corroded connections
5. Excessive loads
6. Battery electrolyte substitutes
7. Freezing of electrolyte

NOTE

THESE FAILURES DO NOT CONSTITUTE WARRANTY.

OFF-SEASON STORAGE

If the machine is to be inoperative for a period longer than 30 days, the following precautions are recommended:

1. Working outdoors, drain all fuel from the fuel tank. Use a clean dry cloth to absorb the small amount of fuel remaining in the tank, then run the engine until all fuel in carburetor is exhausted.

WARNING

Do not drain fuel while smoking, or if near an open fire.

2. Drain all the oil from the crankcase (this should be done after the engine has been operated and is still warm) and refill the crankcase with clean new oil.
3. Disconnect the spark plug wire and remove the spark plug from the cylinder. Pour about six drops of engine oil into the cylinder, and then pull the recoil starter several times to spread the oil on the cylinder wall. Replace the spark plug, but DO NOT connect the wire.
4. Clean the engine and the entire mower thoroughly.
5. Lubricate all lubrication points indicated in figures 31 and 32. Then wipe the entire machine with an oiled rag in order to protect the surfaces.

GRASS CATCHER Model No. 191-015A is available as optional equipment for the mowers shown in this manual.

WARNING

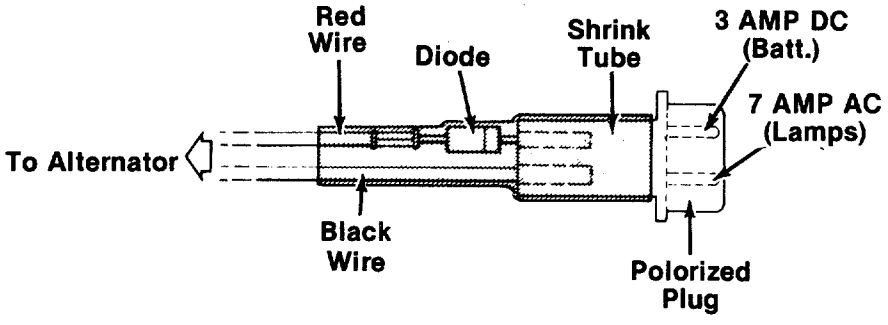
The mower should not be operated without the entire grass catcher or chute deflector in place.

NOTE

Under normal usage bag material is subject to wear, and should be checked periodically. Be sure any replacement bag complies with the mower manufacturer's recommendations.

For replacement bags, use only factory authorized replacement bag No. 764-0121.

TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
Engine will not crank	Battery installed incorrectly	The battery must be installed with the negative, identified at the terminal post by (Neg, N or -), grounded. The positive (Pos, P or +) attaches to the large cable from the solenoid. The small red wire from the fuse holder or circuit breaker is also attached to the positive terminal.
	Blow fuse or circuit breaker	Replace fuse with 7½ amp. fuse ¼ x 1¼" lg. Circuit breaker will reset itself when it cools off. Fuses or circuit breakers seldom open or fail without a reason. The problem must be corrected. Check for loose connections in the fuse holder. Replace fuse holder if necessary. A dead short may be in the cranking or charging circuit where the insulation may have rubbed through and exposed the bare wire. Replace the wire or repair with electrican's tape if the wire strands have not been damaged. Note: Look for a wire pinched between body panels, burned by the exhaust pipe or muffler or rubbed against a moving part.
	Battery is dead or weak	Use a hydrometer to check the condition of the battery. The Specific Gravity (s.g.) should be 1.265 at 80°F. (1.215 s.g. minimum needed for cranking engine). The reason for the battery failing must be determined. (1) Defective battery. Battery will not accept or hold a full charge. (2) Short circuit. Check for grounded wire. (3) Charging system not working, either engine alternator or trickle charger. **Trickle Charger.** Check with multimeter. Charger 725-0578—input 120 V A.C., no load output 13.5 V D.C., rated load current 1 amp. Charger 727-0507—input 120 V A.C., no load output 17.4 V D.C., rated load current 1/2 amp. **Alternator** (dual or single circuit) The charging system is an alternator located under the flywheel. It is unregulated and rated 3 amp. at 3600 r.p.m. A diode (rectifier) is located in the output lead just before the wire harness plug on the engine side.  The diode changes A.C. to D.C. to charge the battery. A bad diode can either fail to charge the battery or discharge the battery if the alternator is shorted as well as the diode. To test: (1) Disconnect charger lead from the battery (small red wire). (2) Connect 12 V small test lamp between the 3 amp. D.C. charge lead and the positive terminal of the battery. (3) With the engine off, the lamp should not light. If it does, the diode and possibly the alternator should be replaced. (4) Start the engine. The lamp should light. If it does not,the alternator (stator) or lead wire is bad and should be replaced.
	Mechanical failure. (Wires and switches)	The interlock system includes two mechanical activated switches which are wired in series in the circuit used to energize the starter solenoid. While testing the interlock system, you will make the mower temporarily unsafe by permitting the engine to be started with the blade and clutch engaged. WARNING: While testing, disengage the clutch, shut off the blade control, set the parking brake and place the gear shift lever in neutral. Attach a wire (minimum 18 gauge) to the positive terminal of the battery and touch the other end to the small terminal on the solenoid. **If the engine does not crank:** (1) There is a loose connection or poor ground. (2) The solenoid may be bad. The solenoid can be checked by using a heavy wire (#8 gauge minimum) and jumping between the two large terminals. If the engine cranks, the solenoid is bad. (3) If the engine does not crank when you jump the solenoid, have the starter motor tested by an authorized engine dealer. If the engine does crank, the problem is with one of the safety switches, ignition switch or the wire between the fuse holder (or circuit breaker) and the small terminal on the solenoid. Note: Look for a poor connection at the switches or a defective switch. Replace if necessary.
Engine cranks but will not start	Throttle or choke not in starting position	Check owner's guide for correct position for throttle control and choke (if separate control) for starting.

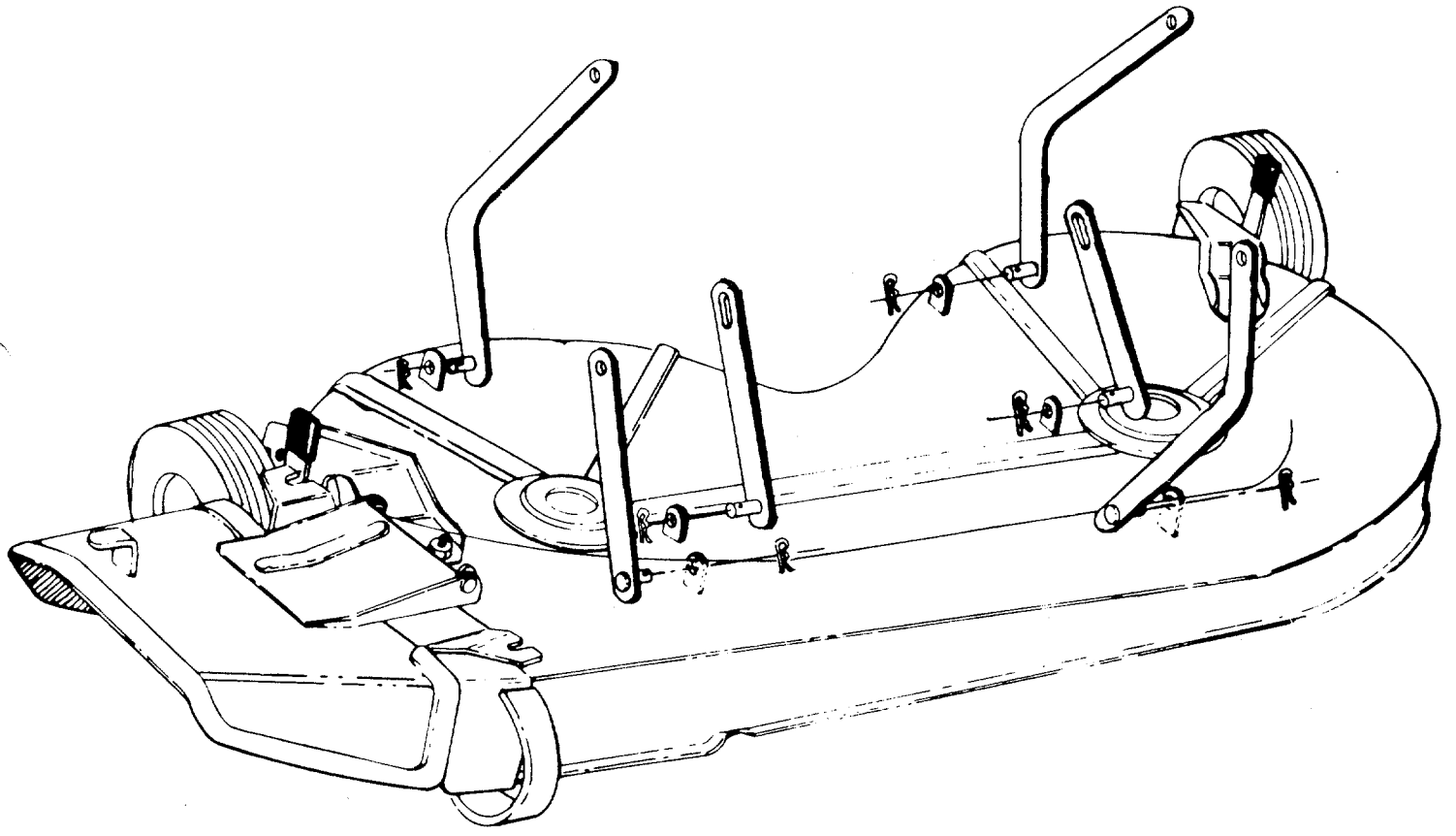
TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
	No spark to spark plug	Spark plug lead disconnected. Connect lead. Hold spark plug lead away from engine block about 1/8". Crank engine. There should be a spark. If not, have engine repaired at authorized engine service dealer. Faulty spark plug. To test, remove spark plug. Attach spark plug lead to spark plug. Ground the spark plug body against the engine block. Crank the engine. The spark plug should fire at the electrode. Replace if it does not.
	No fuel to the carburetor	Gasoline tank empty. Fill. Fuel valve shut off. Open valve. Valve is located either at the bottom of the fuel tank or on the carburetor. Fuel line plugged. Remove and clean.
	Air filter dirty	If the air cleaner is dirty, the engine may not start. Clean or replace as recommended by the engine manufacturer.
Engine smokes	Engine loses crankcase vacuum	Dipstick not seated or broken. Replace defective part. Engine breather defective. Replace.
Excessive vibration	Bent or damaged blade spindle	**Stop engine immediately.** Check all pulleys, blade spindles, blade adpaters, keys and bolts for tightness and damage. Tighten or replace any damaged parts.
	Bent blade	**Stop engine immediately.** Replace damaged blade. Only use original equipment blades.
Mower will not discharge grass or leaves uncut strips	Engine speed low	Throttle must be set between 3/4 and full throttle.
	Transmission selection	Use lower transmission gear. The slower your ground speed, the better the quality of cut.
	Blades short or dull	Sharpen or replace blades (uncut strip problem only).

DECK LINKAGE

NOTE

Refer to illustration below for proper deck link hook up. If the deck is removed for any reason use the illustration below for correct assembly.



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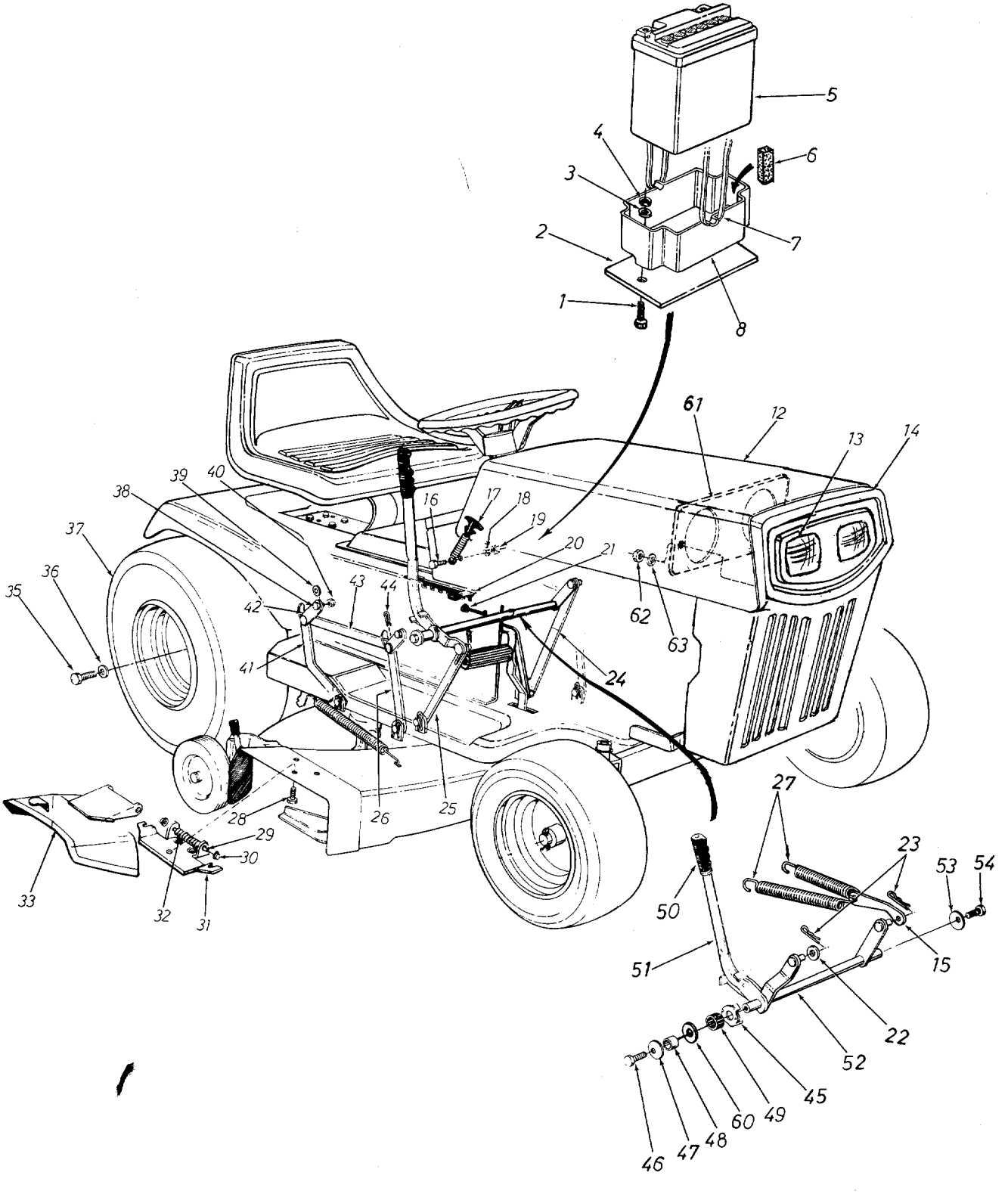

RIGHT HAND VIEW

131-487A PARTS LIST FOR RIGHT HAND VIEW MODEL 131-487A

REF. NO.	PART NO.	DESCRIPTION	NEW PART	REF. NO.	PART NO.	DESCRIPTION	NEW PART
1	710-0377	Hex Bolt ¼-20 x .62" Lg.*		33	11633	Chute Cover Ass'y.	
2	14464	Reinforcement Plate	N	35	710-0627	Hex Scr. 5/16-24 x .75" Lg.*	
3	736-0142	Fl-Wash. .281" I.D. x .50" O.D.		36	736-0242	Bell. Wash. .345 I.D. x .88 O.D.	
4	712-0287	Hex Nut ¼-20 Thd.*		37	734-0601	Rear Wheel Ass'y.—Comp. 18.0 x 8.50	
5	725-0514	12 V-Battery					
6	722-0135	P.V.C. Foam		38	738-0140	Shld. Scr. .437 Dia. x .180	
7	735-0204	Rubber Band	N	39	736-0264	Fl-Wash. .344 I.D. x .62 O.D.	
8	731-0534	Battery Box	N	40	712-0267	Hex Nut 5/16-18 Thd.*	
12	11836 —456	Hood		41	10349	Deck Link Ass'y.	
13	725-0744	Head Lamp		42	09721	Pivot Link Ass'y.	
14	10793 —456	Grille		43	09735	Connecting Rod 3/16 x 1 x 12.5" Lg.	
15	13638	Spring Link					
16	710-0289	Hex Scr. ¼-20 x .50" Lg.*		44	714-0101	Inter. Cot. Pin ½" Dia.	
17	723-0296	Hood Latch Ass'y.		45	11029	Handle Pivot Brkt.	
18	736-0329	L-Wash. ¼" Scr.*		46	710-0201	Hex Scr. 3/8-16 x .62" Lg.*	
19	712-0287	Hex Nut ¼-20 Thd.*		47	736-0133	Fl-Wash. .400 I.D. x 1.25 O.D.	
20	11027	Handle Stop Brkt. Ass'y.					
21	726-0121	Push Cap ¼" Dia. Black		48	750-0273	Spacer .632 I.D. x .88 O.D.	
22	736-0192	Fl-Wash. .531 I.D. x 1.13 O.D.		49	735-0195	Rubber Wash.	
				50	720-0157	Grip	
23	714-0101	Inter. Cot. Pin ½" Dia.		51	749-0212	Lift Handle	
24	13636	Lockout Link Ass'y.		52	13630	Lift Handle Brkt. Ass'y.	
25	13636	Lockout Link Ass'y.		53	736-0219	Bell. Wash. .400 I.D. x 1.13 O.D.	
26	10904	Deck Link Ass'y.					
27	732-0232	Spring Brkt.		54	710-0201	Hex Scr. 3/8-16 x .62" Lg.*	
28	710-0195	Hex Scr. ¼-28 x .62" Lg.*		60	736-0237	Fl-Wash. .656" I.D. x 1.25" O.D.	
29	711-0576	Pivot Pin					
30	726-0106	Push-On Flange Palnut		61	10795	Headlight Retainer	
31	11399	Adapter Plate Ass'y.		62	712-0107	Hex Cent. L-Nut ¼-20 Thd.	
32	732-0261	Torsion Spring		63	736-0463	Fl-Wash. ¼" I.D.	

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

(456—Radiant Tangerine)

When ordering parts, if color or finish is important use the appropriate color code shown above. (e.g. Radiant Tangerine Finish—11836 (456).)

NOTE

This instruction manual covers various models and all specifications shown do not necessarily apply to your model. Specifications subject to change without notice or obligation.

WHEEL CHART

FRONT WHEEL		REAR WHEEL	
734-0998	Wheel Ass'y. Comp.	734-0601	Wheel Ass'y. Comp.
734-0997	Rim Ass'y. Only	734-0603	Rim Ass'y. Only
734-0498	Tire Only 15 x 6.00	734-0516	Tire Only 18 x 8.50
734-0255	Air Valve	734-0255	Air Valve
741-0313	Bearing		

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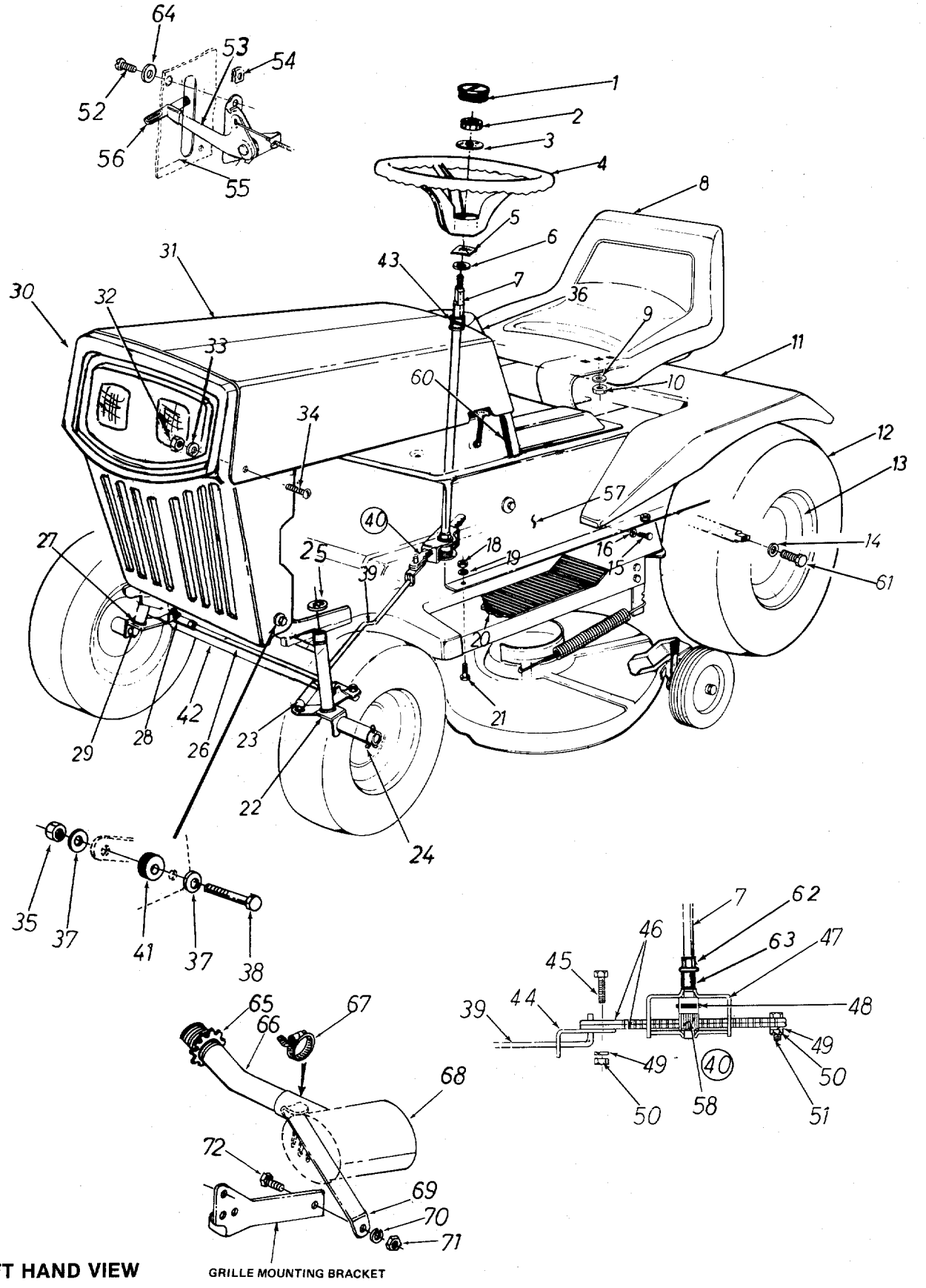


LEFT HAND VIEW

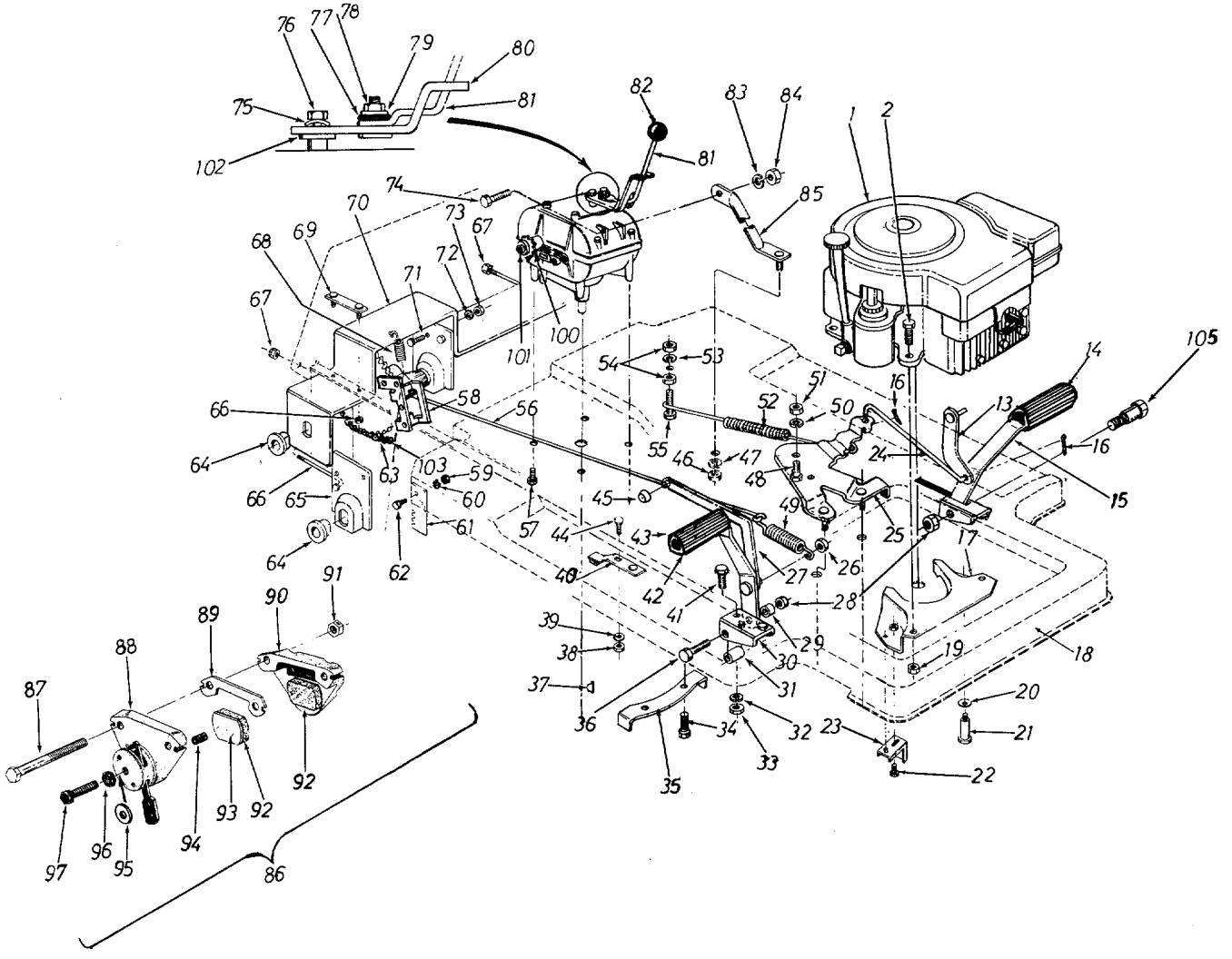
GRILLE MOUNTING BRACKET

131-487A PARTS LIST FOR LEFT HAND VIEW MODEL 131-487A

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	731-0220		Steering Wheel Cap	
2	712-0158		Hex Cent. L-Nut 5/16-18 Thd.	
3	736-0219		Bell. Wash. .400 I.D. x 1.13 O.D.	
4	731-0356		12.0 inch Steering Wheel	
5	712-0222		Push Nut 5/8" Dia.	
6	736-0174		Wave Wash. .660 I.D. x .88 O.D.	
7	738-0407		Steering Shaft	
8	757-0264		Seat Ass'y. Comp.	
9	736-0921		Spring L-Wash. ½" Scr.*	
10	712-0206		Hex Nut ½-13 Thd.*	
11	09087	—456	Rear Fender	
12	734-0601		Rear Wheel Ass'y. Comp. 18.0 x 8.50	
	734-0516		Rear Wheel Tire Only 18.0 x 8.50	
	734-0255		Air Valve—Tubeless	
13	734-0603		Rear Wheel Rim Ass'y.	
14	736-0242		Bell. Wash.	
15	710-0258		Hex Scr. ¼-20 x .62" Lg.*	
16	736-0329		Spring L-Wash. ¼" Scr.*	
17	13322		Grille Frame	
18	712-0267		Hex Nut 5/16-18 Thd.*	
19	736-0119		Spring L-Wash. 5/16" Scr.*	
20	723-0241		Foot Pad 15.75" Lg. x 4.0" Wide	
21	710-0259		Hex Sems Scr. 5/16-18 x .62" Lg.*	
22	14453		Front Axle Ass'y. L.H.	N
23	723-0156		Ball Joint Ass'y.	
24	714-0470		Cotter Pin 1/8" Dia. x 1.25" Lg.*	
25	726-0159		Push Nut	
26	711-0613		Tie Rod	
27	741-0313		Flange Brg. .630" I.D. x .810 O.D.	
28	723-0156		Ball Joint Ass'y.	
29	14452	—456	Front Axle Ass'y. R.H.	N
30	10793	—456	Grille	
31	11836	—456	Front Hood	
32	712-0287		Hex Nut ¼-20 Thd.*	
33	736-0329		Spring L-Wash. ¼" Scr.*	
34	710-0286		Truss Mach. Scr. ¼-20 x .50" Lg.*	
35	712-0375		Hex Cent. L-Nut 3/8-16 Thd.	
36	12360		Dash Panel Ass'y.	
37	736-0253		Bell. Wash.	
38	738-0145		Shld. Scr. .498" Dia. x .835" Lg.	
39	747-0138		Steering Rod	
40	717-0294		Steering Ass'y. Breakdown	
41	748-0190		Spacer	
42	14198		Front Pivot Bar Ass'y.	
43	748-0228		Hex Flange Brg. .505 I.D. Bronze	
44	12372		Steering Rod Brkt.	
45	710-0412		Hex Scr. ¼-28 x .75" Lg.*	
46	11048		Steering Segment	
47	11074		Steering Housing Ass'y.	
48	715-0134		Spring Pin Spir. 3/16" Dia. x 1.50" Lg.	
49	736-0329		Spring L-Wash. ¼" Scr.*	
50	712-0117		Hex Nut ¼-28 Thd. Lock*	
51	710-0412		Hex Scr. ¼-28 x .75" Lg.*	
52	710-0277		Hex AB-Tapp Scr. #8 x .50	
53	746-0356		Throttle Control Complete	
54	712-0147		Speed Nut #10-24 U-Type	
55	12360		Dash Panel Ass'y.	
56	722-0111		Knob Only—Throttle Control	
57	13466		Upper Frame	
58	748-0203		12 Teeth Spur Gear	
60	757-0272		Trim Strip 15" Lg.	
61	710-0627		Hex Scr. w/Lock 5/16"-24 x .75" Lg.	
62	748-0228		Hex Flange Brg. .50 I.D.	
63	750-0151		Spacer .50" I.D. x .75 O.D. x 1.12" Lg.	
64	736-0931		Fl-Wash. .203" I.D. x .41" O.D.	
65	712-0250		Lock Nut	
66	751-0175		Muffler Tubing	
67	726-0132		Hose Clamp	
68	751-0177		Muffler	
69	751-0178		Muffler Brkt.	
70	736-0329		L-Wash. ¼" I.D.*	
71	712-0287		Hex Nut ¼-20 Thd.*	
72	710-0258		Hex Bolt ¼-20 x .62" Lg.*	

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

131-487A



FRAME VIEW

131-487A PARTS LIST FOR FRAME VIEW MODEL 131-487A

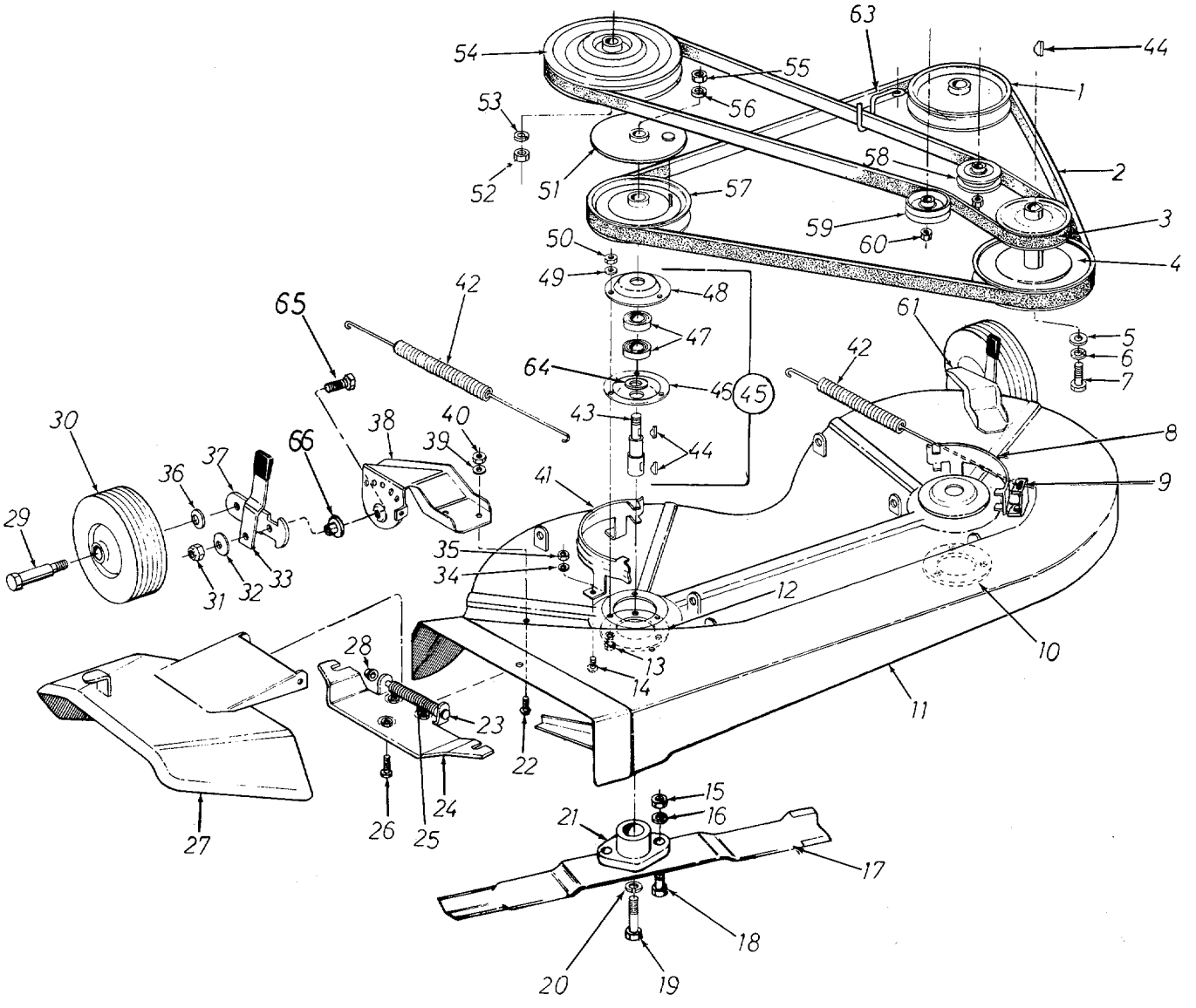
REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	—		Engine	
2	710-0442		Hex Scr. 5/16-18 x 1.50″ Lg.*	
13	11057		Parking Brake—Lever Ass'y.	
14	735-0201		Clutch Pedal Pad	N
15	14420		Clutch Pedal Ass'y.	N
16	714-0507		Cotter Pin 3/32″ Dia. x .75″ Lg.*	
17	12654		Belt Guard Ass'y.—Engine	
18	11090		Frame Ass'y.	
19	712-0267		Hex Nut 5/16-18 Thd.*	
20	736-0105		Bell-Wash. .400 I.D. x .88 O.D.	
21	738-0215		Shld. Scr. .489″ Dia. x 3.00″ Lg.	
22	710-0259		Hex Sems. Scr. 5/16-18 x .62″ Lg.*	
23	12160		Belt Keeper Ass'y.	
24	747-0112		Clutch Rod	
25	12448		Idler Brkt. Ass'y.	
26	712-0158		Hex Cent. L-Nut 5/16-18 Thd.	
27	13875		Parking Brake—Lever Ass'y.	
28	712-0375		Hex Cent. L-Nut 3/8-16 Thd.	
29	711-0630		Spacer .380 I.D. x .50 O.D. x .562	
30	11039		Pedal "U"-Brkt. Ass'y.	
31	750-0298		Spacer .384 I.D. x .500 O.D. x 1.43″ Lg.	
32	736-0119		L-Wash. 5/16″ Scr.*	
33	712-0267		Hex Nut 5/16-18 Thd.*	
34	710-0198		Hex Sems Scr. 5/16-18 x .75″ Lg.*	
35	~~12886~~ 11845		Transmission Belt Guard	
36	710-0194		Hex Scr. 3/8-16 x 3.00″ Lg.*	
37	714-0129		#4 Hi-Pro Key 3/32″ x 5/8″ Dia. Hdn.	
38	712-0287		Hex Nut ¼-20 Thd.*	
39	736-0329		L-Wash. ¼″ Scr.*	
40	761-0169		Blade Brake Ass'y. 2.60″	
41	710-0198		Hex Sems Scr. 5/16-18 x .75″ Lg.	
42	14219		Brake Pedal Ass'y.	N
43	735-0201		Brake Pedal Pad	N
44	710-0134		Carriage Bolt ¼-20 x .62″ Lg.*	
45	726-0121		Push Cap ¼″ Dia. Black	
46	712-0267		Hex Nut 5/16-18 Thd.*	
47	736-0119		L-Wash. 5/16″ Scr.*	
48	738-0140		Shld. Scr. .437 Dia. x .180	
49	732-0245		Extension Spring .90 O.D. x 3.75″ Lg.	
50	736-0119		L-Wash. 5/16″ Scr.*	
51	712-0267		Hex Nut 5/16-18 Thd.*	
52	732-0191		Spring .75 O.D. x 11.00″ Lg.	
53	736-0119		L-Wash. 5/16″ Scr.*	
54	712-0267		Hex Nut 5/16-18 Thd.*	
55	710-0442		Hex Sems Scr. 5/16-18 x 1.00″ Lg.*	
56	747-0277		Brake Rod .25″ Dia. x 23.88″ Lg.	
57	710-0198		Hex Sems Scr. 5/16-18 x .75″ Lg.*	
58	13459		Disc Brake Brkt. Ass'y.	
59	712-0287		Hex Nut ¼-20 Thd.*	
60	736-0329		L-Wash. ¼″ Scr.*	
61	10410		Spring Brkt.	
62	710-0258		Hex Scr. ¼-20 x .62″ Lg.*	
63	713-0240		#420 Chain ½″ Pitch x 79 Links	
64	741-0199		Plastic Flange Brg. w/Flats	
65	13457		Rear Axle Plate	
66	710-0437		Chain Adj. Link 5/16-18 x 4.38″ Lg.	
67	712-0158		Hex Ins. L-Nut 5/16-18 Thd.	
68	732-0388		Spring	
69	10360		Axle Bolt Plate Ass'y.	
70	13455		Rear Axle Brkt. Ass'y.	
71	710-0198		Hex Sems Scr. 5/16-18 x .75″ Lg.*	
72	736-0119		L-Wash. 5/16″ Scr.*	
73	712-0267		Hex Nut 5/16-18 Thd.*	
74	710-0412		Hex Scr. ¼-28 x .75″ Lg.	
75	736-0270		Bell-Wash. ¼″ I.D. x .375 O.D.	
76	710-0513		Hex Scr. ½-28 x .62	
77	735-0126		Rubber Wash. .33 I.D. x .87 O.D.	
78	712-0158		Hex Cent. L-Nut 5/16-18 Thd.	
79	736-0159		Fl-Wash. .344 I.D. x .88 O.D.	
80	11846		Shift Lever Brkt. Ass'y.	
81	11545		Shift Lever	
82	720-0165		Knob (For Transmission Lever)	
83	736-0329		L-Wash. ¼″ Scr.*	
84	712-0138		Hex Nut ¼-28 Thd.	
85	12797		Transmission Support Brkt.	
86	761-0167		Disc Brake Ass'y.	
87	HU-37-13821		Bolt	
88	HU-39-14097		Housing w/Lever and Pin	
89	HU-39-13946		Spacer	
90	HU-16-13807		Anvil	
91	HU-37-9238		Lock Nut	
92	HU-24-13772		Lining	
93	HU-25-13808		Backing Plate	
94	HU-39-13774		Pin, Actuator	
95	HU-20-9764		Washer	
96	HU-37-13818		Nut	
97	HU-39-13775		Pin, Adjuster	
100	713-0207		Sprocket	
101	716-0114		Snap Ring	
102	717-0234		Hdn. 1.00 I.D. Washer	
103	713-0154		#420 Master Link ½ Pitch	
105	738-0213		Shld. Scr. .498 Dia. x 1.450	

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

(462—Red Flake)

When ordering parts, if color or finish is important use color code shown above. (e.g. Red Flake Finish—11839 (462).)

131-487A



DECK AND BELT SYSTEM

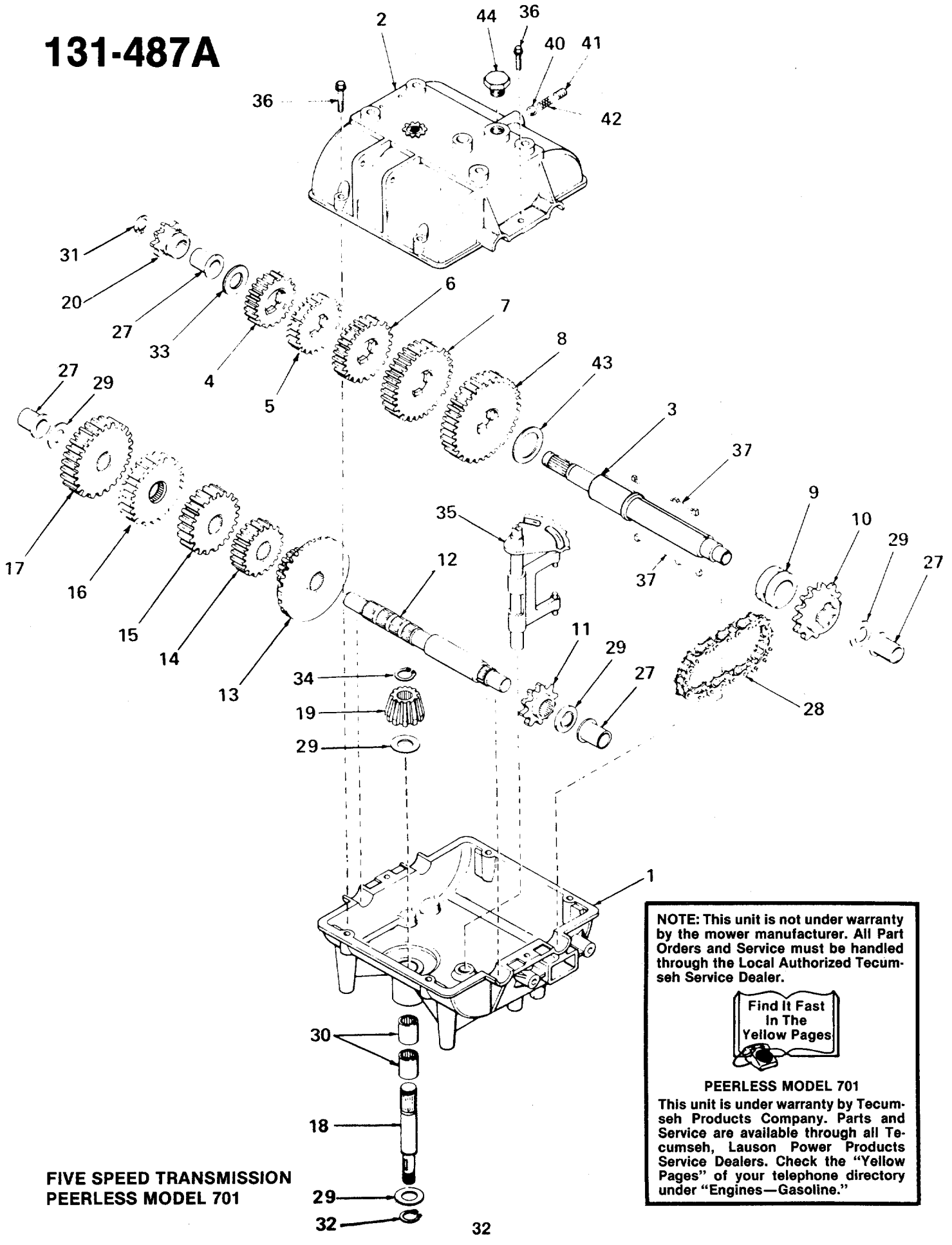
131-487A

PARTS LIST FOR DECK AND BELT SYSTEM MODEL 131-487A

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	756-0251		Deck Pulley 4.75" O.D.	
2	754-0145		"V"-Belt 21/32 x 69" Lg. (Blade Drive Belt)	
3	754-0191		"V"-Belt ½ x 65" Lg. (Transmission)	
4	756-0302		Two Step Engine Pulley	
5	711-0572		Step Washer	
6	736-0169		L-Wash. 3/8" Scr.*	
7	710-0331		Hex Scr. 3/8-24 x 2.25" Lg. Grade 5	
8	12672		Belt Guard—L.H. Deck	
9	12405		Deck Spring Brkt.	
10	09164		Deck Reinforcement Plate	
11	13454		38" Deck Ass'y.	
12	09164		Deck Reinforcement Plate	
13	710-0322		Hex Sems Scr. 5/16-18 x 1.00" Lg.*	
14	710-0289		Hex Scr. ¼-20 x .50" Lg.*	
15	712-0123		Hex Nut 5/16-24 Thd.*	
16	736-0119		L-Wash. 5/16" Scr.*	
17	742-0122		19" Blade	
18	710-0117		Hex Scr. 5/16-24 x 12.00" Lg.	
19	710-0459		Hex Scr. 3/8-24 x 1.50" Lg. H.T.	
20	736-0217		L-Wash. 3/8" Scr. (Heavy Duty)	
21	10769		Blade Adapter Kit	
22	710-0289		Hex Scr. ¼-20 x .50" Lg.*	
23	711-0571		Pivot Pin	
24	11399		Adapter Plate Ass'y.	
25	732-0261		Torsion Spring	
26	710-0195		Hex Scr. ¼-28 x .62" Lg.*	
27	11633		Chute Cover Ass'y.	
28	726-0106		Push Nut—¼" Rod	
29	738-0373		Shld. Scr. .478 Dia. x 1.53" Lg.	
30	734-0973		Wheel Ass'y.—5.0 Dia. (Deck)	N
31	712-0181		Hex Jam L-Nut 3/8-16 Thd.	
32	736-0105		Bell. Wash. .400 I.D. x .88 O.D.	
33	14082		Spring Lever Ass'y. w/Knob	
34	736-0329		L-Wash. ¼" Scr.*	
35	712-0287		Hex Nut ¼-20 Thd.*	
36	736-0105		Bell. Wash. .400 I.D. x .88 O.D.	
37	10937		Wheel Pivot Bar	
38	09080		Wheel Brkt.—R.H. (Deck)	
39	736-0329		L-Wash. ¼" Scr.*	
40	712-0287		Hex Nut ¼-20 Thd.*	
41	12673		Belt Guard—R.H. (Deck)	
42	732-0307		Extension Spring	
43	711-0255		Blade Spindle	
44	714-0365		#6 Hi-Pro Key 5/32 x 5/8" Dia.	
45	09321		Spindle Ass'y. Comp. (Deck)	
46	08253		Bearing Housing	
47	741-0919		Ball Brg. .787 I.D. x 1.85 O.D.	
48	08253		Bearing Housing	
49	736-0329		L-Wash. ¼" Scr.*	
50	712-0287		Hex Nut ¼-20 Thd.*	
51	09322		Blade Brake Disc	
52	712-0922		Hex Jam Nut ½-20 Thd.*	
53	736-0921		L-Wash. ½" I.D.*	
54	756-0174		Transmission Pulley	
55	712-0261		Hex Jam Nut 5/8-11 Thd.	
56	736-0158		L-Wash. 5/8" Scr.*	
57	756-0251		Deck Pulley 4.75" O.D.	
58	756-0116		"V"-Belt Idler 3.06" O.D.	
59	756-0217		Fl. Idler 2.75" O.D. w/Flanges	
60	712-0116		Hex Ins. L-Nut 3/8-24 Thd.	
61	09082		Wheel Brkt.—L.H. (Deck)	
62	13453		38" Deck Ass'y. Comp. (For Service)	
63	732-0358		Belt Trap	
64	13703		Bearing Shield	
65	710-0342		Hex Bolt 3/8-16 x 1.00" Lg.*	
66	748-0279		Shoulder Spacer	

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

131-487A



FIVE SPEED TRANSMISSION
PEERLESS MODEL 701

NOTE: This unit is not under warranty by the mower manufacturer. All Part Orders and Service must be handled through the Local Authorized Tecumseh Service Dealer.

Find It Fast In The Yellow Pages

PEERLESS MODEL 701

This unit is under warranty by Tecumseh Products Company. Parts and Service are available through all Tecumseh, Lauson Power Products Service Dealers. Check the "Yellow Pages" of your telephone directory under "Engines—Gasoline."

131-487A

PARTS LIST FOR FIVE SPEED TRANSMISSION PEERLESS MODEL 701

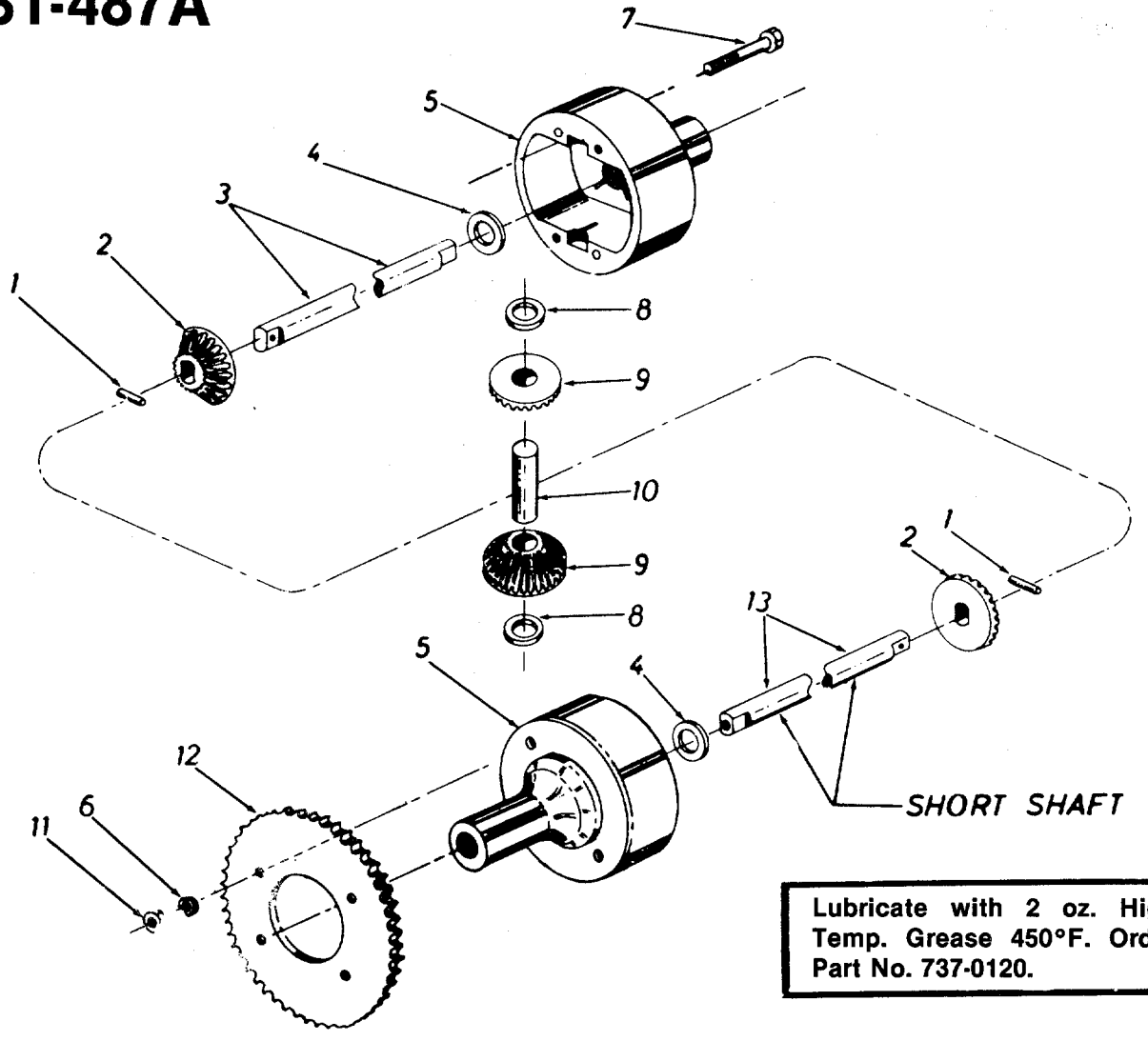
REF. NO.	PART NO.	DESCRIPTION
1	PE-770061	Case, Transmission
2	PE-772070	Cover, Transmission
3	PE-776164	Shaft, Output and Brake
4	PE-778121	Gear, Spur (20 teeth)
5	PE-778122	Gear, Spur (22 teeth)
6	PE-778123	Gear, Spur (25 teeth)
7	PE-778124	Gear, Spur (30 teeth)
8	PE-778125	Gear, Spur (35 teeth)
9	PE-784266	Collar, Shift
10	PE-786060	Sprocket (14 teeth)
11	PE-786061	Sprocket (10 teeth)
12	PE-776134	Shaft, Counter
13	PE-778109	Gear, Bevel (42 tooth and 15 tooth spur gear)
14	PE-778126	Gear, Spur (20 teeth)
15	PE-778127	Gear, Spur (25 teeth)
16	PE-778128	Gear, Spur (28 teeth)
17	PE-778129	Gear, Spur (30 teeth)
18	PE-776140	Shaft, Input
19	PE-778113	Bevel Pinion, Input
20	PE-786049	Sprocket (8 teeth)
27	PE-780105	Bushing, Flanged
28	PE-786062	Chain, Roller (No. 41 chain, 22 links)
29	PE-780072	Race, Thrust
30	PE-780106	Bearing, Needle
31	PE-792072	Ring, Retaining
32	PE-792035	Ring, Retaining
33	PE-780109	Washer
34	PE-788040	Ring, Retaining
35	PE-784271	Rod and Fork Ass'y., Shift
36	PE-792073	Scr., ¼-20 x 1¼ Hex Hd. Tap-Tite
37	PE-792089	Key
40	PE-792077	Ball, 5/16" Steel
41	PE-792078	Screw, 3/8-16 x 3/8 Set
42	PE-792079	Spring
43	PE-780108	Washer, Thrust
44	PE-792074	Plug

NOTE: This unit is not under warranty by the mower manufacturer. All Part Orders and Service must be handled through the Local Authorized Tecumseh Service Dealer.

PEERLESS MODEL 701

This unit is under warranty by Tecumseh Products Company. Parts and Service are available through all Tecumseh, Lauson Power Products Service Dealers. Check the "Yellow Pages" of your telephone directory under "Engines—Gasoline."

131-487A



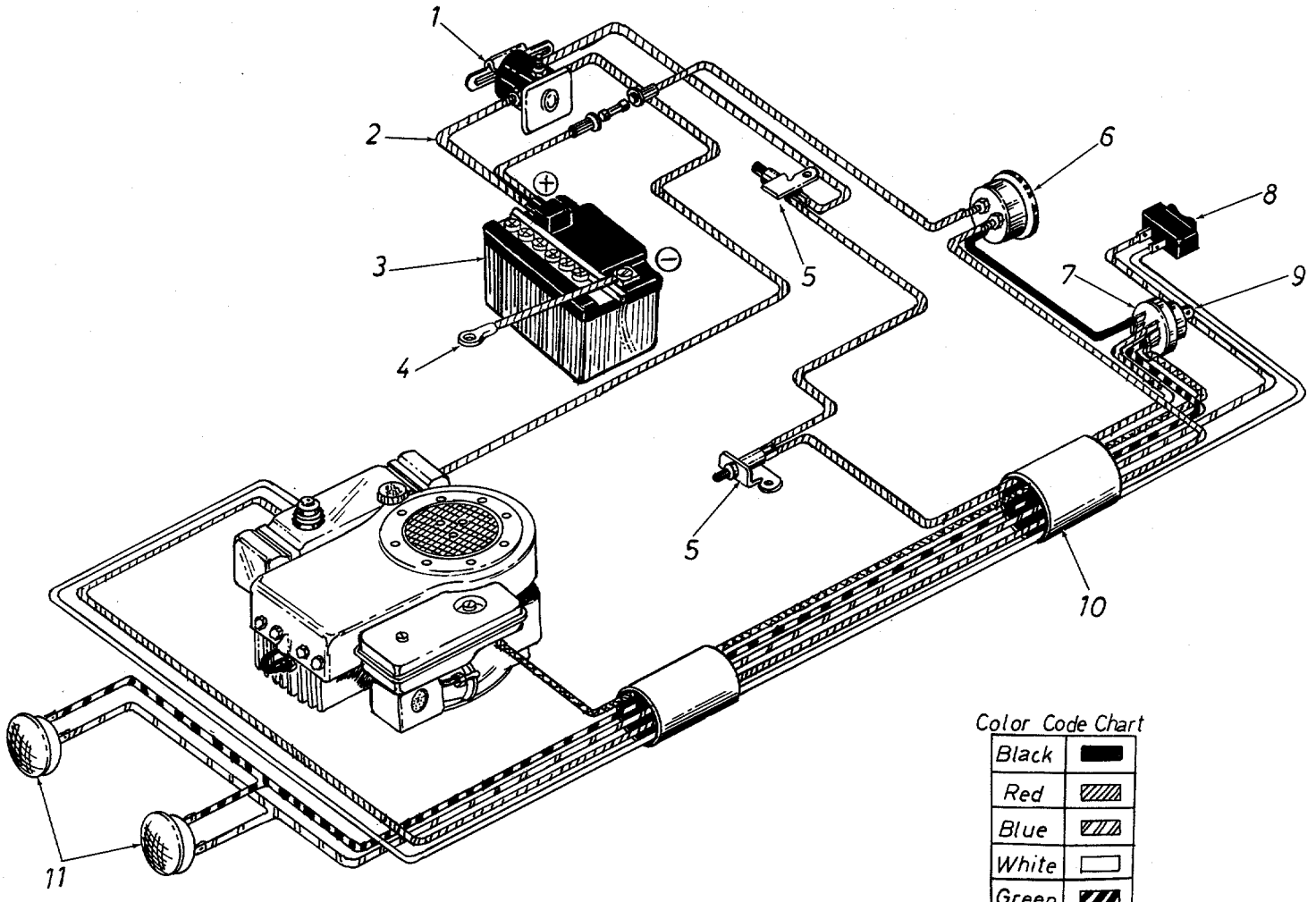
Lubricate with 2 oz. High Temp. Grease 450°F. Order Part No. 737-0120.

PARTS LIST FOR DIFFERENTIAL ASSEMBLY 717-0330

REF NO.	PART NO.	Qty. Req'd.	DESCRIPTION	NEW PART
1	715-0247	2	Spring Pin Spir. 3/16" Dia. x 1.00" Lg.	
2	748-0185	2	Gear—Double "D" Hole	
3	738-0250	1	Shaft—Long 17.01" Lg.	
4	736-0188	2	Fl-Wash. .760 I.D. x 1.49 O.D.	
5	717-0341	2	Housing Half	
6	736-0119	2	L-Wash. 5/16" Scr.*	
7	710-0363	2	Hex Scr. 5/16-24 x 4.00" Lg.*	
8	736-0187	2	Fl-Wash. .640 I.D. x 1.24 O.D.	
9	748-0158	2	Gear—Round Hole	
10	711-0276	1	Drive Pin	
11	712-0237	2	Hex Cent. L-Nut 5/16-24 Thd.	
12	09133	1	Sprocket—60 Tooth	
13	738-0249	1	Shaft—Short 9.65" Lg.	

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

131-487A



ELECTRICAL SYSTEM FOR MODEL 131-487A

REF. NO.	PART NO.	DESCRIPTION	NEW PART
1	725-0530	Solenoid	
2	725-0122	Electric Wire	
3	725-0514	Battery	
4	725-0221	Electric Wire	
5	725-0268	Safety Switch—Black—N.O.	
6	725-0119	Ammeter	
7	725-0267	Ignition Switch	
8	725-0634	Headlight Switch	
9	725-0201	Ignition Key	
10	725-0738	Wire Harness	N
11	725-0222	Headlights	

PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

Parts and service for all MTD manufactured power equipment are available through the authorized service firms listed below. All orders should specify the model number of your unit, part numbers, description of parts and the quantity of each part required.

BRIGGS AND STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE

Briggs & Stratton, Tecumseh and Peerless parts and service should be handled by your nearest authorized engine service firm. Check the yellow pages of your telephone directory under the listing **Engines—Gasoline,** Briggs & Stratton or Tecumseh Lauson.

NOTE: If any parts are found to be missing or defective upon assembly of this unit, write to advise the factory so that immediate replacement can be made.

ALABAMA	**BIRMINGHAM**	
Auto Electric & Carburetor Co.	2625 4th Ave. S.	35233
ARKANSAS	**FORT SMITH**	
Mity Mite Motors, Inc.	4515 S. 16th St.	72901
	NORTH LITTLE ROCK	
Sutton's Lawn Mower Shop	Rt. 4, Box 368	72117
CALIFORNIA	**PORTERVILLE**	
Billious	75 North D Street	93257
	SAN FRANCISCO	
J.W. Jewett Co.	981 Folsom St.	94107
COLORADO	**DENVER**	
Spitzer Industrial Products Co.	Box 59, 43 W. 9th Ave.	80201
FLORIDA	**JACKSONVILLE**	
Radco Distributors	4909 Victor St. Box 5459	32207
	OPA LOCKA	
Small Eng. Dist.	2351 N.W. 147th St.	33054
GEORGIA	**EAST POINT**	
East Point Cycle & Key	2834 Church St.	30344
ILLINOIS	**LYONS**	
Keen Edge Co.	8615 Ogden Ave.	60534
INDIANA	**ELKHART**	
Parts & Sales Inc.	2101 Industrial Pkwy.	46514
IOWA	**DUBUQUE**	
Power Lawn & Garden Equip.	2551 J.F. Kennedy	52001
LOUISIANA	**NEW ORLEANS**	
Suhren Engine Co.	8330 Earhart Blvd.	70118
MARYLAND	**TAKOMA PARK**	
Center Supply Co.	6867 New Hampshire Ave.	20012
MASSACHUSETTS	**SPRINGFIELD**	
Morton B. Collins Co.	300 Birnie Ave.	01107
MICHIGAN	**LANSING**	
Lorenz Service Co.	2500 S. Pennsylvania	48910
	MOUNT CLEMENS	
Power Equipment Dist.	36463 South Gratiot	48043
MINNESOTA	**HOPKINS**	
Hance Distributing Inc.	420 Excelsior Ave. W.	55343
MISSISSIPPI	**BILOXI**	
Biloxi Sales & Service, Inc.	506 Caillavet St.	39533
MISSOURI	**KANSAS CITY**	
Automotive Equip. Service	3117 Holmes St.	64109
	ST. JOSEPH	
Ross-Frazier Supply Co.	8th and Monterey	64503
	ST. LOUIS	
Henzler, Inc.	2015 Lemay Ferry Road	63125
NEW JERSEY	**BELLMAWR**	
Lawnmower Parts Inc.	717 Creek Rd.	08030
NEW YORK	**CARTHAGE**	
Gamble Dist., Inc.	West End Ave.	13619
NORTH CAROLINA	**GOLDSBORO**	
Smith Hardware Co.	515 N. George St.	27530
	GREENSBORO	
Dixie Sales Company	335 N. Green	27402
OHIO	**CARROLL**	
Stebe's Mid-State Mower Supply	Box 366, 71 High St.	43112
	CLEVELAND	
Bleckrie, Inc.	7900 Lorain Ave.	44102
	WADSWORTH	
National Central	687 Seville Rd.	44281
	YOUNGSTOWN	
Burton Supply Co.	1301 Logan Ave. Box 929	44501
OKLAHOMA	**MUSKOGEE**	
Victory Motors, Inc.	605 S. Cherokee	74401
	OKLAHOMA CITY	
Forest Sales Inc.	6415 N. Olie	73116
OREGON	**PORTLAND**	
Kenton Supply Co.	8216 N. Denver Ave.	97217
PENNSYLVANIA	**CHESTER**	
Stull Equipment Corp.	742 W. Front St.	19013
	HARRISBURG	
EECO Inc.	4021 N. 6th St.	17110
	PHILADELPHIA	
Thompson Rubber Co.	5222-24 N. Fifth St.	19120
	PITTSBURGH	
Bluemont Co.	11125 Frankstown Rd.	15235
	PUNXSUTAWNEY	
Frank Roberts & Sons	R.D. 2	15767
TENNESSEE	**KNOXVILLE**	
Master Repair Service	2000 Western Ave.	37921
	MEMPHIS	
American Sales & Service, Inc.	3035-43 Bellbrook	38116
TEXAS	**DALLAS**	
Marr Brothers, Inc.	423 E. Jefferson	75203
	FORT WORTH	
Woodson Sales Corp.	1702 N. Sylvania	76111
	HOUSTON	
Bullard Supply Co.	2409 Commerce St.	77003
	SAN ANTONIO	
Catto & Putty, Inc.	414 Live Oak	78298
UTAH	**SALT LAKE CITY**	
A-1 Engine & Mower Co.	437 E. 9th St.	84111
VERMONT	**BURLINGTON**	
Vermont Hdwe. Co. Inc.	180 Flynn Ave.	05401
VIRGINIA	**RICHMOND**	
RBI Corp.	963 Myers St.	23260
WASHINGTON	**SEATTLE**	
Bailey's Inc.	1414 14th Ave.	98102
WEST VIRGINIA	**CHARLESTON**	
Young's, Inc.	233 Virginia St., E.	25301
WISCONSIN	**MARSHFIELD**	
Power Pac	301 E. 29th St.	54449

WARRANTY PARTS AND SERVICE POLICY

The purpose of warranty is to protect the customer from defects in workmanship and materials, defects which are NOT detected at the time of manufacture. It does not provide for the unlimited and unrestricted replacement of parts. Use and maintenance are the responsibility of the customer. The manufacturer cannot assume responsibility for conditions over which it has no control. Simply put, if it's the manufacturer's fault, it's the manufacturer's responsibility; if it's the customer's fault, it's the customer's responsibility.

CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES:

1. **Replacement of Missing Parts** on new equipment.
2. **Replacement of Defective Parts** within the warranty period.
3. **Repair of Defects** within the warranty period.

All claims MUST be substantiated with the following information:

1. **Model Number** of unit involved.
2. **Date** unit was purchased or first put into service.
3. **Date of failure.**
4. **Nature of failure.**